JPRS 83106

21 March 1983

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 264

19990810 107

Approved for Public Release
Distribution Unlimited



FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

2 133 JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 264

CONTENTS

ASIA

AUSTRALIA	
Briefs Phone Service Advances Digital Data Service Satellite Links Expansion	1 1 1
NEW ZEALAND	
Briefs New Microwave Link	2
PAPUA NEW GUINEA	
Briefs TV Controversy	3
PEOPLE'S REPUBLIC OF CHINA	
Chengdu's 64-Circuit Duplex Telegram Automatic Repeating System (ZHEJIANG RIBAO, 10 Jan 83)	4
PRC To Use Satellite To Exchange TV News (ZHONGGUO XINWEN SHE, 25 Feb 83)	5
Telecommunications Protocol Signed With GDR (ADN International Service, 25 Feb 83)	6

	Briefs Microwave Communications-Line New Hainan Television Channel	7 7 7
	Hainan Television Relay Station Communications Satellite Report Cancelled	7 7
VIETNAM		
	Vietnam Responds to 1983 'World Communications Year' (Pham Hien; NHAN DAN, 7 Feb 83)	8
	Briefs International Telecommunications Body Set Up	11
	EAST EUROPE	
INTERNA	TIONAL AFFAIRS	
	Developments in Socialist States' Communications (PTT REVUE, No 6, 1982)	12
	Session of Ministers of Communications, by Vladimir Karafiat Development of Communications, by Daniela Kavecka, Boris Simko	
	LATIN AMERICA	
BERMUDA		
	Briefs Telefax Service	23
CHILE		
	Briefs Direct Telephone Dialing	24
COLOMBI	A	
	Briefs New Television Network Improved Television Broadcasts	25 25
CUBA		
	New Version of 'Radio Marti' Package Reported (Hayana Domestic Service, 26 Feb 83)	26

JAMAICA

	CDE Loan for Phone Company Improvements Approved (THE DAILY GLEANER, 27 Jan 83)	27
	Briefs Aerotel Earnings	28
PERU		
	Briefs Satellite Stations Arrival New FM Station Authorized Radio Station License New T.V. Station	29 29 29 29
	NEAR EAST/SOUTH ASIA	
ALGERI	A	
	Satellite News Transmission Successful (APS,[no page given])	30
BANGLA	DESH	
	IDA Loan To Help Expand Communications Network (THE BANGLADESH OBSERVER, 27 Jan 83)	31
	Seminar on Flow of Information Held in Dhaka (Various sources, various dates)	32
	Information Minister's Opening Address, by Syed Najmuddin Hashim Bangladesh Country Paper Information Secretary's Speech, by A.B.M. Ghulam Mostafa Speech by Press Institute Chairman,	
	by Abdul Wahab Report on Declaration	
INDIA		
	Plans for Launching, Exploitation of Satellites Told (Various sources, various dates)	43
	IRS-1 by 1986 Computer Development Plans	
	Project Director Tells Plans for INSAT 1-B (PATRIOT, 29 Jan 83)	45

	Officia	al Reports on Communications 10-Year Plan (PATRIOT, 29 Jan 83)	46
	Paper 1	Reports Latest Developments in Computers (PATRIOT, 21 Jan 83)	47
		CMC's Accomplishments Told Latest Technology Sought	
	New Pho	one Exchange Installed; Bombay Statistics (THE TIMES OF INDIA, 25 Jan 83)	49
MOROCC	0		
	Briefs	Underwater Telecommunications Cable	50
PAKIST	AN		
	Briefs	Direct Dialing With Tehran Direct Dialing From Leiah Multilingual Teleprinter Circuit	51 51 51
SAUDI	ARABIA		
	Briefs	Space Cooperation With France	52
SUDAN			
	Briefs	Telecommunications Projects	53
		SUB-SAHARAN AFRICA	
TNTER-	AFRICAN	AFFAIRS	
		f SAFRITEC Discusses Telecommunications Problems (Diaby Aboubakar; FRATERNITE MATIN, 3 Feb 83)	54
LIBERI	Ā		
	Briefs	'ELBC' Announced Improvement in Transmission	56
MADAGA	SCAR		
	Malaga	sy TV To Be 'Voice of People' (MADAGASCAR-MATIN, 13 Dec. 83)	57

Deta	(MADAGASCAR-MATIN, 13 Dec 82)	59
NIGERIA		
Brie	fs Kaduna Television	62
SEYCHELLES		
Color	Television Broadcast Launched (TANJUG, 2 Mar 83)	63
SOUTH AFRICA	\mathbf{A}	
Coun	try Probably Needs Three Satellites (Peter Sullivan; THE STAR, 1 Mar 83)	64
More	on Proposed Communications Satellite (Johannesburg Domestic Service, 2 Mar 83)	66
Brie	fs Low-Cost CAD Communications Satellite Study	67 67
	WEST EUROPE	
EUROPEAN AF	FAIRS	
Nord	ics' Differences on Tele-X Make Project Doubtful (Editorial; SVENSKA DAGBLADET, 1 Feb 83)	68
Swed	en Pressing Norway for Greater Tele-X Contribution (Morten Fyhn; AFTENPOSTEN, 12 Feb 83)	70
Fren	ch-Canadian-Belgian-Swiss Group Suggested for DBS Market (Michel Anthonioz; LE MONDE DIMANCHE, 9 Jan 83)	72
SAT	Contract in Tunisia (LES ECHOS, 2 Feb 83)	76
DENMARK		
Fore	ign Television, Local Broadcasting Ending State Monopoly (BERLINGSKE TIDENDE, various dates)	77
	Commission Backs Foreign TV Receiving, by Lisbeth Knudsen Local Radio, TV Stations Tests Soon	

FEDERAL REPUBLIC OF GERMANY

	First FRG Direct TV Satellite To Be Launched in March 1985 (K. T. Munich; FRANKFURTER ALLGEMEINE ZEITUNG/ BLICK DURCH DIE WIRTSCHAFT, 13 Jan 83)	79
	Fiberoptic Communications Network Grows in FRG (FRANKFURTER ALLGEMEINE ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 25 Jan 83)	81
FINLAN	D	
	Finnish Firms Eager for Role in Nordic Tele-X Satellite (Mardy Strom; HUFVUDSTADSBLADET, 18 Jan 83)	83
	Minister Proposes Cooperation With Sweden on Satellite (Editorial; HELSINGIN SANOMAT, 30 Jan 83)	90
FRANCE		
	Report Examines State Role in Data Processing Industry (Eric Rohde; LE MONDE, 25 Jan 83)	91
NORWAY		
	Effect on Norway of Telecommunications Revolution Aired (Knut Lovstuhagen; AFTENPOSTEN, 12 Feb 83)	95
	Telecommunications Introducing Teletex Service in 1983 (Erik Bjornskau; AFTENPOSTEN, 20 Jan 83)	98
	Siemens Expected To Get Contract for Teletex Service (Mariann Nordstrom; AFTENPOSTEN, 20 Jan 83)	100
	Norwegian Prime Minister Resists Swedish Pressure on Tele-X (Eivind G. Karlsen, Einar Solvoll; AFTENPOSTEN, 22 Feb 83)	102
	Firm in Competition for Distress Buoy With Satellite Link (Rolf L. Larsen; AFTENPOSTEN, 19 Jan 83)	104
	State Television Monopoly Ended by Ads, Cable, Local Stations (Ole Kromann; INFORMATION, 4 Jan 83)	107
PORTUG	AL	
	Marconi Purchases EUTELSAT Link (EXPRESSO, 29 Jan 83)	110
	Briefs Automatic Telephones in South	111

SWEDEN

Ericsson Establishing Branch for Defense, Space Communications (Weje Sanden; SVENSKA DAGBLADET, 8 Feb 83)	112
Ericsson Firm Enjoying Success With Phone Exchanges, Data (Sven-Ivan Sundqvist; DAGENS NYHETER, 13 Feb 83)	114
Official Board Recommends Expansion of Foreign Cable TV (Bo Westmar: DAGENS NYHETER, 15 Feb 83)	122

PHONE SERVICE ADVANCES--Telecom had reduced waiting times for new telephone connections in some parts of Queensland, the state manager, Mr Keith Petrie, said yesterday. Since last June when 20,000 applications for new services were outstanding, the waiting list had been cut to 12,500, he said. The backlog had been reduced by moving equipment across Queensland and spending more money. Telecom would spend \$322 million on capital works in Queensland this year--an increase over last year of 22 percent. Since last June, 51,500 new telephone services had been installed in the state. Mr Petrie said the disproportionate expense of providing automatic services and replacing poor quality, privately erected lines in remote areas limited the extent of this work. [Text] [Brisbane THE COURIER-MAIL in English 1 Jan 83 p 3]

DIGITAL DATA SERVICE--Telecom began to operate its new Digital Data Service (DDS) recently with the connection of one of its first customers, Qantas. Telecom's chief manager, commercial, for NSW, Mr Lex McPherson, said Qantas with its large computer centre in Sydney was now linked by DDS lines to many of its offices throughout the country. "This enables Qantas to provide a streamlined customer service for international travel reservations." He said DDS provided a high quality transmission facility that had been developed primarily for large centralised teleprocessing applications where reliability and instant computer access were of prime concern to customers. Mr McPherson said Phase 1 of the service offered data communications links embracing capital cities in all States and Canberra. Access to DDS would be extended nationwide in the future in response to customer demand. [Text] [Canberra THE AUSTRALIAN in English 4 Jan 83 p 13]

SATELLITE LINKS EXPANSION—The federal government plans to upgrade Australia's satellite links with Asia, Africa and Europe. The minister for communications, Mr Brown, says the government will buy new transmission equipment valued at just over \$1 million. He says it will be used to intensify transmissions from the satellite ground station at Ceduna in south Australia. The station transmits signals to a cluster of satellites over the Indian Ocean and they will have treble the capacity once the new equipment is installed. [Text] [BKO41120 Melbourne Overseas Service in English 0830 GMT 2 Feb 83]

NEW MICROWAVE LINK--A new microwave radio system is to be established between Hamilton and Palmerston North to cope with a growing demand for Post Office telecommunication services. The system, incorporating digital technology, is expected to be completed late next year at a cost of \$4.8 million. The Postmaster-General, Mr Talbot, said it represented the last stage of a full digital link between Auckland and Wellington. It would have a digital transmission capacity of 140 million bits a second and provide up to 1920 telephone or leased circuits. It will be able to transmit voice, video or data signals. A major use will be to meet the demand for the growing computer-to-computer traffic and information services now being developed. Mr Talbot said the system would follow a new route between Hamilton and Palmerston North, and would ensure the already highly reliable service through the main trunk telecommunications network was further increased. [Text] [Wellington THE EVENING POST in English 15 Jan 83 p 16]

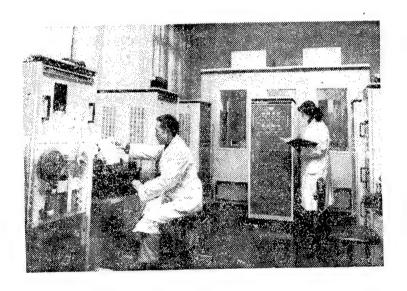
cso: 5500/9043

TV CONTROVERSY--Port Moresby, Wednesday--Political and bureaucratic infighting over the introduction of television in Papua New Guinea has intensified with the National Broadcasting Commission itself announcing that its chairman, Mr Leo Morgan, is to be replaced by the Government. A fortnight ago, the PNG Cabinet ordered the NBC not to introduce television for "four or five years." It made the decision after considering several factors, including press disclosures that the Media Minister, Mr Boyang Sali, acting as Minister for Public Utilities. had issued a television licence to the NBC. The NBC recently announced that it would go ahead with training staff for television and technical tests. This week, the Deputy Prime Minister, Mr Paias Wingti, relieved Mr Sali of the Public Utilities portfolio and announced that the television broadcast licence had been revoked. Mr Morgan's three-year tenure in office is due for renewal on December 27. Cabinet expected to consider Mr Morgan's chairmanship of the NBC today. (AAP) [Text] [Sydney THE SYDNEY MORNING HERALD in English 16 Dec 82 p 4]

CHENGDU'S 64-CIRCUIT DUPLEX TELEGRAM AUTOMATIC REPEATING SYSTEM

Hangzhou ZHEJIANG RIBAO in Chinese 10 Jan 83 p 3

[Text] The newly built 64-circuit duplex telegram automatic repeating system of the Chengdu City Telecommunications Bureau was officially put into operation recently. This system can receive and relay over 40,000 telegrams daily. The processing time for each message has been reduced from 24 minutes originally required by manual processing to 1 minute and 18 seconds.



PRC TO USE SATELLITE TO EXCHANGE TV NEWS

HK241008 Beijing ZHONGGUO XINWEN SHE in Chinese 0216 GMT 25 Feb 83

[Excerpts] Beijing, 24 Feb (XHONGGUO XINWEN SHE) -- according to reports by the TELEVISION WEEKLY: Starting from 1 March, China's Central Television Station will take part in the experiment in exchanging television news in Region A of Asia. This is a component part of the realization of global television news exchanged.

The Asian-Pacific Broadcasting Union has decided to take an active part in the global television news exchange. In addition, it has divided its members into three regions, denoted by A; B; C. Experiments will be conducted separately in these regions. Region A includes China, Japan, Australia, New Zealand, Hong Kong and South Korea; Region B includes the Philippines, Indonesia, Singapore, Thailand and Malaysia; Region C includes India, Pakistan, Bangladesh, Sri Lanka and Iran. It has been decided that that experiments will be conducted in the above regions in March.

From 1 to 4 March and from 7 to 9 March, 7 days altogether, experiments will be conducted in Region A of Asia. During the experiments, in addition to receiving news within our own region, we can also receive news from Region B and Region C. After taking part in the global television news exchange. China's Central Television Station will strengthen its reporting of news about China to foreign countries. In addition, China's Central Television Station can enrich its sources of international news. This helps change the situation in which news about the United Kingdom and the United States is particularly stressed in international news reports.

TELECOMMUNICATIONS PROTOCOL SIGNED WITH GDR

LD260015 East Berlin ADN International Service in German 2101 GMT 25 Feb 83

[Text] Berlin, 25 Feb (ADN) -- A delegation from the PRC Communications Ministry which has been visiting the GDR this week held working talks at the GDR Ministry of Posts and Telecommunications. At the end of the talks, which were held in a frank atmosphere, both sides signed a working protocol. The talks concerning developing cooperation between the two countries' Ministries of Posts and Telecommunications.

During its stay the Chinese delegation aquainted itself with the state of development of GDR posts and telecommunications and inspected installations in Berlin as well as in the Potsdam and Dresden areas (bezirke). Li Qiangfen, the PRC's ambassador extraordinary and plenipotentiary to the GDR, gave a reception to mark the delegation's visit. Dr Heinz Aull, deputy minister for posts and telecommunications, attended on behalf of the GDR.

MICROWAVE COMMUNICATIONS-LINE--The microwave communications line between Shenyang, Liaoning Province, and Qinhuangdao, Hebei Province, which is for special use by the power departments, has been recently built. In the past, the official communications between the ministry of water conservancy and power and the Northeast Electric Power Administration Bureau only depended on the long-distance telephone line, which often brought about a strained situation in communications for power production and supply. After the line is set up, the communications lines among Beijing, Qinhuangdao and Shenyang will be thoroughly connected, on which the state can directly conduct power production in the northeast areas and power supply provided by the areas. [Shenyang LIAONING RIBAO in Chinese 4 Feb 83 p 2 SK]

NEW HAINAN TELEVISION CHANNEL—The Hainan television station will begin broadcasting programs over its new second channel on a trial basis on the evening of 12 February. Viewers in Haikou can watch three television programs. Around the spring festival, the station will broadcast programs over its second channel in the evening and afternoon every day. Due to limitations in financial and material resources, after the spring festival, the station will broadcast over its second channel every Saturday and Sunday. In the future, where circumstances permit, the broadcasting time will gradually increase. [HK180114 Haikou Hainan Island Service in Mandarin 0330 GMT 11 Feb 83 HK]

HAINAN TELEVISION RELAY STATION—The construction of the Qiongzhong County (Huling) Television Relay Station was recently completed. The relay station has relayed the programs broadcast over No. 12 channel of the Hainan Television Station. The viewers within 25 kilometers of the county seat are able to receive the television programs. [Haikou Hainan Island Service in Mandarin 0330 GMT 11 Feb 83 HK]

COMMUNICATIONS SATELLITE REPORT CANCELLED--Beijing XINHUA Domestic Service in Chinese at 0212 GMT on 16 February transmitted an item entitled "China To Launch First Synchronous Communications Satellite This Year," which is identical to the Beijing Domestic Service report published in the 16 February China DAILY REPORT on page K 17 under the headline "Planned Expanded Use of Satellites Reported" and subhead "Communications." However, at 1314 GMT on 16 February XINHUA transmitted a service message stating that its earlier report "does not conform with facts and should be canceled." HK161408 [Editorial Report]

VIETNAM RESPONDS TO 1983 'WORLD COMMUNICATIONS YEAR'

Hanoi NHAN DAN in Vietnamese 7 Feb 83 p 3

[Article by Pham Hien, chairman, Vietnam 1983 "World Communications Year" Committee, and head of Posts and Telegraph General Department: "Responding to 1983 'World Communications Year"]

[Excerpt] In Vietnam, after decades of bitter wars, building and combat under extremely difficult conditions; under the leadership of the party and government; and with the help of all sectors, echelons, mass organizations and the people and the international assistance and cooperation mostly from the fraternal socialist countries, the communications network has ceaselessly developed and effectively served the leadership of the party and state; the development of the economic, cultural, social, security, national defense and other sectors; and the people's sentiments and culture, and has made deserving contributions to the glorious victories of the party and nation. In recent years, within the framework of national construction and defense of the socialist fatherland, this network continued to be consolidated, developed and gradually modernized: in addition to fully using with good results the existing material and technical base, we installed the new "Hoa Sen" (Lotus Flower) satellite-communication ground station in the Intersputnik communications network, the Hanoi-Haiphong cable communication network, the semiautomatic Telex system in Hanoi and Ho Chi Minh City, microwave communications limited-channel lines and automatic telephone stations in municipalities and cities, which further extended the service areas and increasingly satisfied the domestic and international communications needs, as well as clearly increased service capacities and economic effectiveness. In 5 years (1976-1980), the total value of services increased by 144 percent, with the annual rate of increase being 24.9 percent and labor productivity increasing by 21.7 percent. However, as compared with our needs and with international standing, our present communications network remains at a low level; construction and equipment are patchy and lack synchronization and balance, with its management and operations being limited and the news industry remaining weak; the sources of foreign-currency capital invested in the network still

encounter many difficulties, with international-cooperation assistance remaining to be had; and in addition, severe natural calamities have limited the capacities and quality of telephone, telegraph and delivery services, with letters, postal matters and parcels being delivered still slowly and losses and mishandling still being allowed to take place.

The "1983 World Communications Year" is a good opportunity for us to enhance our understanding of the position and role of communications toward economic and social development, national construction and defense and international relations, and on that basis to recommend more positive and practical plans and measures to effectively carry out the task the 5th Party Congress has recommended for communications and postal services, which is: "To consolidate, improve and exploit the potential capabilities of the existing communications network; to build the material and technical base; and to strengthen the capabilities and to improve the quality of communications and postal services. To closely coordinate the national communications network with the sectors' specialized communications networks in order to serve well the economy and national defense, " and the practical tasks as recommended in the resolution of the 3rd Plenum of the VCP Central Committee. We properly carry on the tasks about building up the district level and the work to be done by Hanoi and Ho Chi Minh City and strive to create within not too distant a future a unified national communications network capable of satisfying the communications needs of the party and state, as well as all sectors, in accordance with a well-defined development project. We adhere to the purpose and meaning of the activities in the "World Communications Year" of 1983 and actually apply them to Vietnam. In a close coordination with different organs, sectors, mass organizations and the people, the communications sector considers the activities in the "World Communications Year" program in Vietnam an important component of the 1983 state plan; strives to do the work that has been recommended in the best manner possible; attaches importance to intensive propaganda in connection with the position and role of communications, posts and telegraph, organization of exhibits, symposiums, etc.; and carries out a number of important projects, such as preparing for construction of a College of Communications with aid from the "World Communications Year" fund; the international wave propagation project with assistance from United Nations fund (PNUD); and in cooperation with the Soviet Union and Cuba, construction of the north-south axis communications line. We continue to improve and develop the communications network serving agriculture in the Mekong River delta; improve the transportation of parcel posts and news publications along the north-south axis and on the roads that link provinces or exist within provinces and districts; and build in each province, municipality and special zone a model post office, a relatively complete telephone network within a locality or district, and a telephone system for a number of factories, work sites and state farms, such as the Vinh Phu paper mill, the Haiphong harbor, the Dau Tieng reservoir project, etc. The postal sector as a whole

launches an emulation movement to promote productive labor and economy, with the "Good communications quality, labor productivity and economic results" goal, to respond realistically to the "World Communications Year."

Besides the activities in the country, we actively respond to and participate in the "World Communications Year" activities of the world and region and strengthen our cooperation with the socialist countries, the two friendly countries -- Laos and Kampuchea -- and all other countries. We develop a concept of self-sufficiency and self-strengthening; exploit and fully use all of the country's potential capabilities; at the same time deeply appreciate and try to win the cooperation and assistance of other countries, which we consider as very important factors to help speed up the development of our country's communications network; attach importance to developing the strength of the socialist collective ownership system; and combine the managerial and professional activities of the state organs with the activities of the masses and people, the activities among all levels and sectors, thus creating a combined strength of society as a whole and stepping up a vigorous development of communications. The Vietnam 1983 "World Communications Year" Committee at both central and local levels actively carries on a comprehensive and active program of action throughout the country. All cadres, workers, civil servants and combatants doing communications and postal work are to carry out in the best manner possible the work to be done in the "World Communications Year" and to combine it with their regular tasks.

5598

VIETNAM

BRIEFS

INTERNATIONAL TELECOMMUNICATIONS BODY SET UP-Hanoi, VNA, 7 Feb-The Vietnam Committee for the International Year of Telecommunications and Liaison made its first public appearance here today. The committee with Pham Nien, director general of the General Post Office, as its president includes members representing 23 relevant branches and offices. Present on the occasion were Karl H. Englund, representative of the United Nations Development Programme (UNDP). Muhammad Al-Va, representative of the International Telecommunication Union (ITF); and Kham Luong, vice minister of communications and posts and head of a Lao delegation now on a visit to Vietnam. Also today, Vice Chairman of the Council of Ministers Dong Si Nguyen received Karl Englund and Muhammad Al-Va. He expressed confidence in the success of the International Year of Telecommunications and Liaison and thanked the United Nations organization and other countries for their assistance to Vietnam's postal service. [Text] [OWO71822 Hanoi VNA in English 1520 GMT 1 Feb 83]

INTERNATIONAL AFFAIRS

DEVELOPMENTS IN SOCIALIST STATES' COMMUNICATIONS

Session of Ministers of Communications

Prague PTT REVUE in Czech No 6, 82 p 162-163

[Article by Eng Vladimir Karafiat, Federal Communications Ministry]

[Text] Last September the 13th Session of the Conference of Ministers of Communications of the Organization for the Cooperation of Socialist States in the Fields of Telecommunications and Postal Service [OSS] took place in Karl-Marx-Stadt. Since this session was held during the year of the 25th anniversary of the founding of this organization, it is proper to recall at least a concise history of its creation and its purpose.

The OSS was founded on the suggestion of the USSR communications administration on 16 December 1957 at a meeting of the communications ministers in Moscow. The founding members were the communications administrations of the ALR [People's Republics of Albania], BLR [Bulgerian People's Republic], CPR [Chinese People's Republic], CSSR [Czechoslovak Socialist Republic], KLDR [the Korean People's Republic], MLR [Hungarian People's Republic], MoLR [Mongolian People's Republic], GDR, PLR [Polish People's Republic], RSR [Socialist Republic of Romania], USSR, and VDR [Socialist Republic of Vietnam]. In 1965, a session of the conference of ministers of communications accepted the communications administration of Cuba into OSS membership, and in 1980 the communications administration of the People's Republic of Laos, thereby increasing OSS membership to 14.

The charter document of the OSS is entitled "Agreement Concerning the Organization of Cooperation Among Socialist Countries in the Telecommunications and Postal Service Sectors". The agreement sets forth the objectives of the OSS, its structure and other particulars common to international organizations.

The objective of the OSS is to coordinate the activities of the communications administrations of the socialist countries in the area of telecommunications and postal service, and in particular to unify regulations and rates, to coordinate the efforts of communications research institutes, as well as activities within other international organizations.

The executive organ of the OSS is the Conference of Ministers of Communications. Meetings of the Conference of Ministers of Communications at first met annually (1957 in Moscow, 1958 in Prague, 1959 in Berlin). In recent years they have been held every other year (1961 in Warsaw, 1963 in Budapest, 1965 in Peking, 1969 in Bucharest, 1971 in Varna, 1973 in Ulan Bator, 1976 in Havana, 1978 in Tbilisi, 1980 in Bratislava, 1982 in Karl-Marx-Stadt).

The OSS has no secretariat or other permanent administrative organ to prepare for the sessions and carry out all administrative and other work. In the periods between session of the Conference of Ministers, OSS duties are performed by the communications administration of the country in which the next scheduled meeting will take place. The objective of this coordinating administrative work is to gather information concerning task fulfillment by individual communications administrations (OSS members), to compile it in the form of summary report and to present this report to the session of the Conference of Ministers. In this session the coordinating administration of communications also prepares for the next Conference of the Ministers of Communication.

The Conference of Ministers discusses the basic questions of cooperation between communications administrations/OSS members, and approves basic guidelines for the development of communications services. Decisions (resolutions) adopted at sessions of the conference of ministers are binding.

Each session of the conference of ministers approves a final protocol and working papers after these have been previously discussed in the various working commissions.

The documents submitted to a session of the conference of ministers are prepared by the individual communications administrations/OSS members, and are based on documentation from the other communications administrations. In some instances, these documents are further discussed at conferences of experts, according to a plan approved by the Conference of Ministers.

The annual conferences of directors of the research institutes of the communications administrations/OSS members are important. At these conferences the research activities of these institutes is coordinated with the objective of avoiding a duplication of effort in research, to coordinate this activity and to allocate the tasks related to individual research projects. The directors conference works out a list of research projects and determines which administration will be the managerial administration for a given project and which of the other administrations and/or research institutes will play a role in the project and in what way.

The activity of the OSS is proceeding in accordance with the fundamental tasks of the organization, which include the following:

--improving the operation of, and expanding telephone and telegraph links among the socialist countries;

--perfecting the organization of the existing telecommunications and postal networks among the socialist countries;

- --coordinating questions related to the design and construction of radio, relay, cable, and air transmission lines;
- -- the development and implementation of technical measures to provide for the mutual exchange of television and radio programs;
- -- the expansion of postal contact and the introduction of progressive techniques of work organization and postal service mechanization;
- --reaching agreements concerning rates for communications services among socialist countries;
- --coordinating activities in the field of scientific and technical cooperation and research and development work;
- --coordinating activities related to the allocation and use of radio frequencies;
- --coordinating ionospheric service activities;
- --providing assistance in the upgrading and development of communications equipment;
- --coordinating activities of international organizations.

These OSS activities encompass everything that might assist in the improvement and expansion of mutual ties in the area of postal services, wire and wireless telecommunications, including the technical assurance of the exchange of radio and television programs.

Moreover, the 13th Session of the Conference of Ministers of Communications of the OSS discussed issues from all areas of communications activity during its meetings in Karl-Marx-Stadt on 6-11 September.

The foregoing session was attended by the following heads of delegations: Pando Vancev, BLR communications minister; Illes Toth, MLR general director of communications; Pham Nien, VDR general director of communications; Rudolph Schulze, GDR government vice chairman and minister of telecommunications and postal services; Kim En Tche, KLDR communications minister; Pedro Guelmes Gonzalez, communications minister of the Republic of Cuba; Irvuzyn Norovzav, MoLR communications minister; Leon Kolatkowski, PLR first deputy minister of communications; Julian Tudosie, RSR vice minister of transportation and communications; Vasilij Samsin, USSR communications minister, and Vlastimil Chalupa, CSSR communications minister.

Representation of the communications administration of the People's Republic of Laos was entrusted to the secretary of the Laotian embassy in the GDR, Touane Vorazarnom. The session was attended by almost 100 delegates.

The session was opened by R Schulze, government vice chairman and minister of telecommunications and postal services of the GDR, who was elected chairman of the 13th Session. In his opening speech, he evaluated the activities and results achieved during the time since the 12th Session.

The session proceeded in seven working commissions (for telecommunications, for radiotelecommunications, for research and development cooperation, for postal services, for the economics of communications, for the dissemination of printed matter, and for the editorial preparation of the final documents). The agenda contained 42 points from all of the above areas. The discussions of each point were based on documents prepared beforehand by designated communications administrations/OSS members, along with a proposed resolution. After discussion in the working commissions, these documents were submitted for approval by the plenary session.

In specific areas of communications activity, the following important resolutions were adopted:

--In the field of telecommunications, a supplement was approved to the Guidelines for the Operation of International Telephone and Telegraph Circuits and the Guidelines for the Operation of International Television and Radio Channels, both of which will contribute to an increase in the quality and reliability of telecommunications operations;

--Approval was given to regulate meetings of operational employees of international telephone switchboards with the objective of fostering the systematic establishment of contacts, thereby primarily improving the manual implementation of telephone operations.

The Czechoslovak communications administration has for the second time taken upon itself the task of preparing a summary document regarding the routings of the lines for nonswitched direct calls through OSS member countries, which will culminate the joint work of these countries on a plan for the design of an international telecommunications network in the area of Europe and the Mediterranean.

By way of preparing for the upcoming conference of government representatives in Nairobi, issues involving unified approach by communications administrations/OSS members were discussed.

--In the area of radiocommunications, there was the adoption of a "Table of Frequency-band Allocations for the Radiocommunication Services of Countries Whose Communications Administrations are Members of OSS". Improved conditions were created for further mutual cooperation by socialist countries in the development of radiocommunication services. In addition, the content was agreed upon for a program of cooperation among the communications administrations/OSS members for the proceedings of the upcoming World Radiocommunications Conference of the International Telecommunications Union for mobile services and shortwave transmission.

--In the area of cooperation in research and development, discussions were held on the fulfillment of the research and development cooperation plan for 1981-1982, the 1982 plan for research and development cooperation was approved and preliminary approval was given to the plan for 1983-1984.

During proceedings, emphasis was placed on the resolution of the most important projects, a shortening of the time required for solutions to be found, and on the effective utilization of project findings.

--In the postal sector, the conference discussed the problems of the introduction of mechanization and new technology into postal operations and proposed, among other things, new ways of monitoring and reducing fuel consumption in the transportation of packages and printed matter.

In the field of containerization, its effectiveness was emphasized and the preconditions created for its expansion into the international arena.

--In the area of the economics of communications, documents were discussed and approved which are of importance primarily for the further development and improvement of communications management.

The Czechoslovak communications administration is making use of the approved documents in the further elaboration of the Set of Measures and the Program of Communications Development.

--In the area of the dissemination of printed matter, improvements were achieved in the ongoing exchange of information regarding the introduction of new technology and the utilization of computer technology in assuring the shipping, transferral and dissemination of printed matter in specific countries.

The organization of the next, i.e., the 14th Session of the Conference of Ministers of Communication of the OSS was entrusted to the communications administration of the MLR, which also thereby becomes the administration charged with coordinating OSS activities.

The program for the next session consists of 38 documents, 4 of which are to be drafted by the Czechoslovak administration.

In conclusion, it may be stated that the 13th Session of the Conference of Ministers of Communications of the OSS took place in an atmosphere of friendship and mutual cooperation and that it contributed to a strengthening and expansion of cooperation among socialist countries in the field of communications.

Development of Communications

Prague PTT REVUE in Slovak No 6, 82 pp 164-165

[Article by Eng Daniela Kavecka and Eng Boris Simko, Zilina facility of the Communications Research Institute: "The Development of Communications in OSS Member Countries"]

[Text] Since 1973 the Federal Communications Ministry has published annually "A Comparative Analysis of the Development of Communications in OSS (Organization for the Cooperation of Socialist States in the Field of Communications) Member Countries", which has been the subject of discussions at conferences of OSS communications ministers.

At present, 27 indicators are monitored and evaluated which characterize the development and utilization of the postal service, the Postal Newspaper Subscription Service, telephone, telegraph, radio, television, and the development of profits, costs, labor productivity and revenues in the communications systems of 10 OSS member countries (BLR [the People's Republic of Bulgaria], MLR [People's Republic of Hungary], VSR [Socialist Republic of Vietnam], the GDR, Cuba, MoLR [People's Republic of Mongolia], PLR [People's Republic of Poland], RSR [Socialist Republic of Romania], the USSR and the CSSR).

The objective of this comparative analysis is to discover patterns in the quantitative and qualitative development of individual indicators with the idea of improving the quality and increasing the volume of available services, thereby better satisfying the needs of the population. The analysis also has practical significance for resolving issues of planning and for other economic activities.

The 1981 analysis implies that in the area of postal services and the GDR is achieving the best performance, in the sense of having a post office for every 1,395 inhabitants and, territorially speaking, a post office for every 9.03 square kilometers. The CSSR is in fourth place in the first category, behind the MLR and USSR, with a post office for every 3,025 people, and in second place in the second category, with a post office for every 25.22 square kilometers of territory.

In terms of letters mailed per 1,000 inhabitants, the CSSR is in first place with 86,550, and the GDR second with 75,620. Overall it may be stated that for most of the OSS countries 1981 was a year of moderate decline in this indicator in comparison with the previous year.

The greatest number of packages sent per 1,000 inhabitants during the period under study was in the GDR, 2,270, which is in line with the high quality of services offered. With 1,600 packages per 1,000 inhabitants, the CSSR is in second place. This indicator has shown a tendency to remain stable in the OSS countries.

The indicators describing the Postal Newspaper Subscription Service monitor, on the one hand, the number of people per sales outlet for printed matter, and, on the other hand, the number of newspapers and periodicals per 1,000 inhabitants. The MLR has the largest number, with 8,853 people per sales outlet, while in the GDR there are 8,778 people and in the BLR 8,131 people. In the second indicator the BLR, MLR, GDR, MoLR and CSSR all showed continual increases in the period under study, while the PLR and USSR showed declines. The greatest number of newspapers and periodicals per 1,000 inhabitants was achieved in 1981 in the GDR with 196,612 impressions.

In the field of telephone operations, records are kept of the number of telephone stations per 100 inhabitants, the number of pay phones in the urban telephone network per 10,000 inhabitants, the degree of automation of the local telephone networks, the number of personal long-distance telephone conversations per 1,000 inhabitants and the degree of automation of long-distance telephone operations.

In 1981, the CSSR had the greatest density of telephone stations per 100 inhabitants (21.03). All OSS countries are experiencing ongoing growth in this indicator.

The density of automatic pay phones in local telephone networks is greatest in the USSR (9.09 per 10,000 people), the BLR (9.03) and the GDR (8.94). In the CSSR in 1981, this indicator reached a value of 4.93. In this indicator, too, all OSS states are experiencing continual growth. The GDR and MLR have reached 100 percent automation of their local telephone networks, and this is being approached by the USSR (98.80 percent), the CSSR (98.16 percent) and the BLR (95.65 percent).

The greatest conversational activity in long-distance telephone operations over the period being studied was in the GDR (with 41,680 conversations per 1,000 inhabitants in 1981), which is related to the fact that the GDR also has the highest level of automation (95.20 percent) of its long-distance telephone operations of any OSS country. By comparison, the CSSR had 19,314 long-distance calls per 1,000 people, and has achieved a 80.54 percent level of automation of this network.

The indicators related to telegraph operations follow the number of telegrams received per 1,000 inhabitants and the number of teletype messages per 100,000 inhabitants.

The first of these indicators displayed great variability throughout the period in question. The indicator increased only for the USSR, where telegraph operations are also the most widespread (in 1981 there were 2,008 received telegrams per 1,000 inhabitants) and, with the exception of 1980, the GDR (in 1981 there were 719 telegrams per 1,000 inhabitants). There was a steady decline in this indicator in the CSSR (663 telegrams per 1,000 inhabitants in 1981), the BLR, MLR, and PLR.

Available data indicate a rising trend in the number of teletype messages for a majority of OSS countries (with the exception of the VSR and MLR). The greatest increase for the entire period in question was reached by Cuba, a 3.46-fold increase and the PLR, 3.14-fold increase. The GDR has the largest number of teletype messages (91.57 per 100,000 inhabitants), along with the MLR (80.83).

The indicator of the number of participants per 100 inhabitants in the wire broadcasting system exhibits differing development patterns. The BLR, MoLR and USSR experienced continual growth throughout the period in question. The PLR experienced a decline in this indicator.

The greatest number of documented radio receivers is in the GDR (38.59 per 100 inhabitants), the CSSR (26.71), and the PLR (24.22).

From 1973-1981 the number of television receivers in every OSS country showed a rising trend. The greatest number of television receivers is in the GDR (34.71 per 100 inhabitants), the USSR (29.60) and in the CSSR (28.01).

The indicator of the number of inhabitants per communications employee is lowest in the CSSR (133 inhabitants), followed by the GDR (135 inhabitants), the MLR (166 inhabitants) and the USSR (169 inhabitants). This indicator is showing a declining trend in all OSS countries.

Investment in communications as a percentage of total investment in the national economy was highest in 1981 in the CSSR (1.61 percent) and in the MLR (1.57 percent).

In terms of revenues from individual communications activities, the revenues from telephone operations has been the largest in all OSS countries. In the CSSR these revenues represented 67.53 percent of total 1981 returns in communications, in the BLR 60.47 percent, in the PLR 57.64 percent, in the MLR 43.93 percent, in the USSR 43.01 percent, and in the GDR 41.23 percent. Telephone revenues experienced the greatest increase over the 1973-1981 period.

The revenues from other communications activities represent a substantially lower percentage of total revenues. In 1981, for instance, in the CSSR postal revenues represented 13.80 percent of the total, telegraph revenues 5.65 percent, wire radio broadcasting 1.10 percent, radio 2.13 percent, television 3.21 percent, other 6.58 percent.

In the structure of costs, the greatest percentage is taken up by wage costs; in 1981 these represented 57.3 percent of the total costs in the PLR, 49.2 percent in the USSR, 47.6 percent in the BLR, 42.1 percent in the GDR and 39.5 percent in the CSSR. Among the other cost categories, the greatest increases were in capital asset depreciation, which grew in the BLR from 20.8 percent in 1973 to 31.9 percent of total 1981 costs, while in the CSSR they grew from 16.6 percent of the total in 1973 to 20.05 percent of the total in 1981.

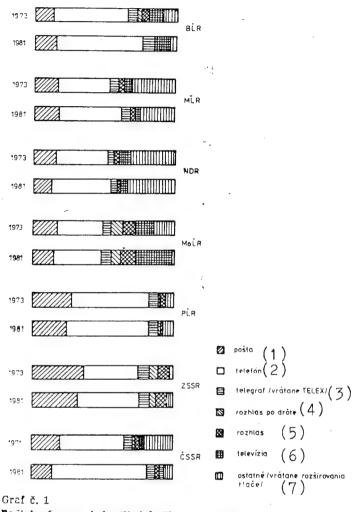
All OSS countries show relatively large fluctuations in labor productivity. The greatest increase in labor productivity in 1981 was experienced in the MLR (14.9 percent).

Both the return on capital assets and the return on costs have been marked by highly fluctuating indicators. The highest return on capital assets in 1981 were in the MLR (18.13 percent), the USSR (14.90 percent) and in the CSSR (14.47 percent). The greatest return on costs in 1981 were achieved in the MoLR (64.01 percent), the CSSR (63.12 percent), the MLR (51.27 percent) and the BLR (48.55 percent).

Indicators related to the mechanization and automation of postal operations have indicated an ongoing increase in the level of outfitting with this equipment in all OSS countries.

In terms of the introduction of automatic and semiautomatic machines for the vending of stamps and valued postal items, the best 1981 results were achieved in the MLR, with 35.61 automats per 100,000 inhabitants, followed by the GDR and the CSSR with 34.03 and 30.40 automats per 100,000 inhabitants respectively.

Graph 1. Revenues from Individual Communications Activities as Percentage of Total Communications Revenues



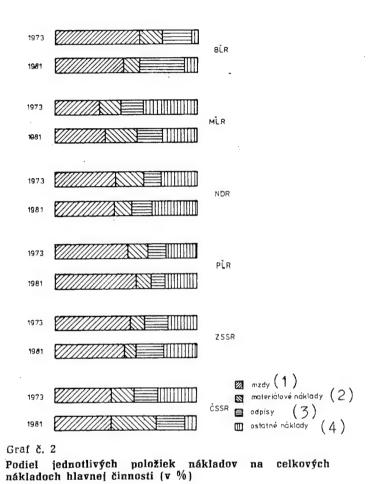
Počiel výnosov jednotlivých činností spojov na celkovom objeme výnosov spojov (v %)

164 ● PTT REVUE 6/1982 (ročník 13)

Key:

- 1. Postal services
- 2. Telephone
- 3. Telegraph (including TELEX)
- 4. Wire radio broadcasting
- 5. Radio
- 6. Television
- 7. Other (including dissemination of printed material)

Graph 2. Individual Cost Categories as Percentage of Costs of Main Activities



Key:

- 1. Wages
- 2. Materials costs
- 3. Depreciation
- 4. Other costs

The degree of motorization of delivery routes has achieved high levels in several OSS countries, with 93.70 percent of all routes being motorized in the USSR, 85.06 percent in the PLR, and 70.85 percent in the GDR.

The comparative analysis of the development of communications in the OSS member countries makes it possible to evaluate and compare the development of communications in these countries. The results of the analysis indicate a dynamic development of communications services, above all the telephone, and to the growth of automation and mechanization and labor productivity in the communications activities of individual socialist states.

BIBLIOGRAPHY

1. Comparative Analysis of the Development of Communications in OSS Member Countries, 1973-1981. Report of Communications Research Institute, Zilina facility, 1982.

9276

BERMUDA

BRIEFS

TELEFAX SERVICE—Announcing Telefax Cable and Wireless, P.L.C. are extending their Bureaufax Service to include Telefax, effective February 1st, 1983. This will enable correspondents in distant countries who possess a compatible CCITT Group III Facsimile apparatus to receive copies of documents transmitted from Hamilton, Bermuda by Cable and Wireless on Church Street, right into their own offices. The Distant Correspondent will also be able to send printed material back to Bermuda by dialling (809) 29-57909. The cost of this service will be \$4.00 for the first page and \$2.00 for each subsequent page, plus the cost of the overseas telephone call. Try Telefax for the transmission of documents, plans, sketches or even sheet music! Further information is available by ringing 5-4777. Ask for Commercial Department. Cable & Wireless Always Planning Ahead to Stay Ahead. [Advertisement] [Text] [Hamilton THE ROYAL GAZETTE in English 27 Jan 83 p 14]

CHILE

BRIEFS

DIRECT TELEPHONE DIALING--A direct dialing telephone service between Santiago and the cities of Osorno and Puerto Montt will begin operating on 30 January 1983. [Santiago Domestic Service in Spanish 1630 GMT 29 Jan 83 PY]

COLOMBIA

BRIEFS

NEW TELEVISION NETWORK--Bogota--According to the governor of the intendency of Caqueta, a second television network has begun operations in that intendency. [PA090040 Bogota Domestic Service in Spanish 1730 GMT 2 Feb 83 PA]

IMPROVED TELEVISION BROADCASTS--Following a promise made by President Betancur, the second television network has been reaching the departments of Caqueta and Huila with a strong signal since 30 January. The network covers 130 municipalities, which comprise 50 percent of Colombia's population. [PAl21711 Bogota Domestic Service in Spanish 1730 GMT 10 Feb 83 PA]

NEW VERSION OF 'RADIO MARTI' PACKAGE REPORTED

FL261450 Havana Domestic Service in Spanish 1100 GMT 26 Feb 83

[Text] The Ronald Reagan administration is attempting to gain congressional approval for a revised version of Reagan's project to establish a subversive radio station against Cuba called Radio Marti, thus named despite the well-known anti-imperialist attitude of Cuba's national hero.

The previous version was rejected by the Senate at the end of December due to opposition by liberal legislators and owners of U.S. radio stations. The latter feared the impact which the radio station's broadcasting on the medium wave frequency of 1040 khz would have on their own commercial stations.

Reagan is now proposing to Congress the use of a radio station belonging to the Voice of America for the so-called Radio Marti. That radio station now broadcasts 5 and 1/2 hours of propaganda against Cuba on 1180 khz, medium wave. This medium wave radio station is truly the only station which the Voice of America operates in that band in the entire world.

CDB LOAN FOR PHONE COMPANY IMPROVEMENTS APPROVED

Kingston THE DAILY GLEANER in English 27 Jan 83 p 6

[Text]

A LOAN of US\$8.3 million from the Caribbean Development Bank (CDB) to the Jamaica Telephone Company to provide the JTC with funds for the procurement, installation and commissioning of transmission and telex equipment, as part of an overall programme of expansion and development of the company, was approved in the House of Representatives Tuesday afternoon under the provision of the Approved Organizations and Authorities Loans (Government Guarantee) Act.

Approval was granted on a resolution moved by the Minister of State in the Ministry of Finance, the Hon St. Clair Shirley on behalf of the Prime Minister and Minister of Finance, the Rt. Hon Edward Seaga.

The Minister said that the purpose of the loan is to assist the JTC with its 5-year development plan, adding that most of the services offered by the company were up to its full capacity and as a result thousands of potential users are on the waiting list.

With the loan, the Minister said, the company "can now offer a more reliable and efficient service tio a

greater number of people all over Jamaica."

The loan carries the following terms and conditions; interesar rate at 9½ percent per annum on the amount withdrawn and outstanding, it is repayable in 40 equal and consecutive quarterly installments, the first due three years from the date of first disbursement. The JTC, will pay to the CDB a commitment fee of I percent on the amount of the loan withdrawn.

Supporting the resolution, the Minister of Public Utilitie and Transport, the Hon Pearnel Charles said that the ITC was trying desperately to meet some of the demands of potential customers, and so funds were desperately needed to secure new instruments and to

carry out connections.

He said that although the JTC was one of the public utility that was doing better than any other, the company was plagued with vandalism, and the company has started a campaign of "tying up" the major districts where telephones are needed in great demand.

Mr. Charles said whole communities are placed out of touch with the world and inside Jamaica as vandals are using the instruments in jute boxes and hi-fi sets, adding that the police and the company's inspectors have been advised to search for these people who vandalised the company's instruments.

"We cannot continue to put up boxes all over the place only for them to last one or two days," the Minister said, and called on the citizens in communities to give protection to the company's instrument which

are there for their protection.

Mr. Charles said that people were still using other people's telephone causing thousands of dollars in loss to the customers and the company itself. He added that he has had discussion with the company to see what measures can be introduced to combat this irresponsible artitude.

The Minister said that the Public Utility Act is to be amended to make stiff penalties for people who misuse the telephone, those who regularly uses other peoples phones andthose who acquire telephones ille-

gally. V

Leader of Opposition Business, Mr. Seymour Mullings said that the opposition had no quarrel with any institution that wishes to increase its efficiency to the public. He said however that the company had borrowed a great deal of money over the years having an outstanding balance of \$44½ million.

"This loan is not a cheap loan, for over the l3 year period it will cost in interest among other things close to \$10 million," Mr. Mullings said, wondering whether the company proposed to ask its customers to pay

increased rates.

The Minister of State in the Ministry of Public Utilities and Transport, the Hon E.K. Powell said that the company was one of those company paying its way and was not a drain on the taxpayers. He said it was a well known business principle that companies borrowed money, but this does not in anyway contribute to rate increases. "What contributes to rate increases are labour and materials cost and the commodity and services it has to purchase from abroad."

Closing the debate, Mr. Shirley said that the loan is not for house-keeping purposes it s for capital expansion. It is to expand the service so that a greater number of people can participate. The resolution was then

approved.

JAMAICA

BRIEFS

AEROTEL EARNINGS -- The wholly owned Government company, Aeronautical Telecommunications Limited (AEROTEL), had gross income figures for 1981 of \$1.1 million, which was an increase of 45.7% over the previous year, the company's annual report has stated. The report was tabled in the House of Representatives on Tuesday in the form of Ministry Paper Number Three, by the Minister of Public Utilities and Transport, the Hon. Pearnel Charles. The report said that Aerotel's gross income for 1981 was \$1,190,369--an increase of 45.7% over the previous year, resulting in a surplus of \$206,261. The accumulated surplus as at December 31, 1981 was \$314,236. The increase in revenue was due to the increase in activity in the airline industry during the year. Aerotel is a wholly owned Government company established August 1978 to perform the operations formerly provided by International Aeradio (Caribbean) Limited, which operated in Jamaica between July 1950 and July 1978. Aerotel provides aeronautical telecommunications on behalf of the Government of Jamaica and satisfies the requirements of the Civil Aviation Department, the Meteorological Division of the Ministry of Public Utilities and Transport, the airline industry and the Airports Authority of Jamaica. In addition, the company offers specialised telecommunications services to other public and private sector organizations. [Text] [Kingston THE DAILY GLEANER in English 28 Jan 83 p 20]

BRIEFS

SATELLITE STATIONS ARRIVAL--After his meeting with the president, Miguel Angel Alva Orlandini, chief of the national media system, announced the arrival of two satellite stations for the exclusive use of the radio and television sys-[Begin Alva recording] During my talk with the president I informed him that the arrival of the first satellite stations has been confirmed for May 1983. These will permit the connection of the state television system with other areas of the country, where ENTEL-PERU [National Telecommunications Enterprise of Peru] does not yet have satellite stations. We hope to install the first stations in Tumbes and in Tacna and after that we will install other stations in the Cusco, Ayacucho and Huaraz areas. Thus, during the course of this year we will be broadcasting nationally via satellite. During this first part of the year we are broadcasting in combination: In one sector of the country, in the central Sierra and southern part of the country we are using the main microwave stations of ENTEL-PERU and toward the northeast we are using satellite. But, during the course of the year we will be dropping the microwave system so that Peruvian radio and television will be broadcast via satellite. Private radio and television networks will also be able to use the system. [End recording] [Excerpt] [PY221908 Lima Domestic Service in English 1200 GMT 22 Feb 83]

NEW FM STATION AUTHORIZED--Two new radio stations have been authorized to broadcast on FM in Lima, they are the Radiodifusora Radiomar and the Radiodifusora Huacayo. [PY052148 Lima Domestic Service in Spanish 1100 GMT 4 Feb 83 PY]

RADIO STATION LICENSE--The broadcasting company Los Andes Incorporated has been authorized to operate a commercial radio station on medium wave in the department of Cajamarca, on a frequency of 1190 kHz. [Text] [PY052148 Lima Domestic Service in Spanish 1100 GMT 2 Feb 83 PY]

NEW T.V. STATION--On dedicating the studios and transmission facilities of the new television station Channel 2 President Fernando Belaunde Terry stressed the responsibility of television in broadcasting news, which must aim at educating the people. [PY052148 Lima EL COMERCIO in Spanish 24 Jan 83 p A-4 PY]

cso: 5500/2037

SATELLITE NEWS TRANSMISSION SUCCESSFUL

LD071223 Algiers APS in English [no page given]

[Text] Algiers, 6 Mar (APS)--A world premier in the field of exchanges of television programmes by satellite yesterday met with success by the Algerian Radio and Television Broadcasting Network (RTA).

For the first time an inter-union transmission was performed without the traditional intermediaries who used to transmit information throughout the continent.

The Asian Broadcasting Union has sent from Kuala Lumpur a news bulletin to the Arab Radio Networks in Kuwait, which in its turn transmitted them to the African National RT Networks. The Algerian RTA as a coordinator sent this programme to the European Union of Radio Broadcasting (UEF). After its pre-recording in Brussels UER transmitted this information throughout the world.

Engineers of RTA have successfully coordinated this first time operation which proves that third world countries are capable of establishing between them systems of exchanges without any other intervention.

IDA LOAN TO HELP EXPAND COMMUNICATIONS NETWORK

Dhaka THE BANGLADESH OBSERVER in English 27 Jan 83 pp 1, 16

[Text] The telecommunication network of Bangladesh will be extended to serve smaller urban and rural communities of the country more efficiently with the help of an SDR 32.5 million (U.S. \$35 million) credit from the International Development Association (IDA) the concessionary affiliate of the World Bank.

Under the third telecommunication projects, the percentage of rural telephone lines in Bangladesh will increase by 60 percent, says a Press release.

Telephone exchange for about 16,000 lines of electronic switching equipment will be installed and local cable networks will be rehabilitated and expanded. A 960-channel microwave radio telephone system between Dhaka and Chittagong will also be completed improving the long distance transmission.

A new training centre for the staff of Bangladesh Telegraph and Telephone Board will be financed by the IDA Credit. The centre at Bogra, in the northwestern part of the country, will have the capacity to train 120 students at a time.

Bangladesh will provide US \$31.07 million towards the project. The US\$3.6 million in foreign exchange required to complete the Dhaka-Chittagong Microwave link will be provided by the Overseas Economic Corporation Fund of Japan.

An IDA credit totalling US\$35.6 million have previously been approved to develop the Telecommunications Sector in Bangladesh.

The new IDA credit is for 50 years, including 10 years grace. It carries no interest but has a small service charge (0.5 percent on the undisbursed balances of the credit and 0.75 percent on the disbursed balances).

SEMINAR ON FLOW OF INFORMATION HELD IN DHAKA

Information Minister's Opening Address

Dhaka THE BANGLADESH OBSERVER in English 29 Jan 83 p 5

[Article by Syed Najmuddin Hashim]

[Text] It is a great honour and privilege for me to be amidst you and to welcome this morning on behalf of the Government of Bangladesh and myself the distinguished participants from home and abroad who are drawn from among communicators and experts in the field of mass communication. I express my heartfelt thanks to the UNESCO which, true to its tradition, championing the causes of balanced flow of information between the developing countries extends its cooperation to the Press Institute of Bangladesh to organise this Seminar.

Many significant changes have occurred in the field of international relations during the past few decades. Rapid development of sophisticated technology and its gradual monopolised ownership by a few already industrialised countries makes the rich countries richer and the poor poorer. This ever-widening disparity and inequality has made the developing countries overly dependent upon the developed countries. This almost exclusive dependence of the developing on the developed for the means of production, i.e.: for the capital equipment is tantamount to erosion of their political sovereignty and independence of action, individually and collectively. There have been discussions and conferences in the developing countries relating to the establishment of a New Economic Order. This call for change in the economic field has obvious implications for other fields of activities also.

Over the years mass communication has continued to gain wider recognition nationally and internationally as a force for socio-economic development activities such as public health, literacy campaign, family planning and agricultural extension.

Motivated by the strong desire for a change in their lot, the developing countries are bent upon redressing the imbalance in the flow of information between the developed and the developing countries. Underlying the idea of redressing the imbalance is the basic perception of a new international order in the field of information and communications.

I am just back from Dakar where we considered measures to combat this imbalance of information militating against the interests of a segment of the Third World, namely the Islamic World inhabited by about onefifth of the human race. The outcome of the first session of the Permanent Islamic Commission of Information and Cultural Affairs would, therefore, be of some relevance to your discussions relating to South Asia. In Dhaka, as in Dakar, you will have to consider ways of evolving and integrating an information strategy within the principles of a new world information and communications order. The complementarity of our several efforts is beyond question since information and communications have obviously to subserve the overriding need to preserve our integrity and cultural specificity. At the same time we have to open up a balanced and equal and non-sectarian dialogue with other cultures who might for the moment be more richly endowed with material wealth and technological resources but whose fate is indissolubly linked with that of the deprived majority in this plant which we share in common.

Imbalance in the flow of information occurs at least at three levels. First, from the First World countries, the home of technology and seat of those sources, i.e., major world news agencies, which distribute information throughout the world. Secondly, among the developing countries themselves.

Evidences are galore and these issues have been discussed over the years that communications among the developing countries are deplorably poor and inadequate and often imbalanced. In most cases we get news about a neighbouring country through multi-national agencies via London, Paris, New York or Moscow.

The third kind of imbalance even occurs within a particular country. There has always been big communication gap between urban and rural areas. In most of the Asian countries the majority of people lives in villages. They have no means to communicate any information back to the cities. Newspaper, radio and television are all city-centred. The news these media disseminate contain hardly anything about rural realities. It is axiomatic that no development goal can ever be fully achieved keeping the vast majority of the people outside the ambit of the communications and information network.

Bangladesh has planned for wide and real decentralization of administration. About 400 than headquarters will become the centres of administration and the focus of development activity at the village level. These centres will provide the opportunity to develop leadership at the grass-roots level. Administrative, financial and other developmental decisions will be taken by these local leaders. From the Capital, principal seat of Government, direct to these centres, and in reverse, from these centres, direct to the Capital, close links will be established. Since these centres will be hub of activities information will primarily emanate from them and at the same time these also will act as feedback to the government which is essential for policy-making.

South Asia is a home of about 1,000 million people. Their accessibility to the sea and land routes has made them victims of economic exploitation for centuries. They have enough resources, yet they are steeped in abysmal poverty because almost all of their resources still remain unharnessed. There is an imperative need for these countries to make collective efforts to develop themselves. The idea of the South Asia Forum is a step towards that end and it is truly launched to ensure accelerated progress.

Cooperation for the development of some selected sectors of a national economy may lead to greater cooperation in other fields for the mutual benefit of each other. Greater expansion of economic transactions, increased amount of trade and commerce will mean increased flow of information which will have definite reflections in the cultural and educational fields.

The rapid advance of technology while opening up new opportunities for progress and expansion in communication has created new problems for the developing countries. The gap between the developed and the developing countries is ever on the increase. As a result the pattern of flow of information remains the one-way traffic as it has always been and likely to be compounded in the future.

This challenge cannot be met single-handedly by any developing country. Transfer of technology for any country is not even a partial solution. Again, it requires capital resources and technical know-how which developing countries do not have. This calls for a policy consensus, collective effort and pooling of resources including economic and human resources to the evolution of which the present group of distinguished participants should address themselves in all seriousness.

Gentlemen, before concluding I apologise to you for taking so much of your valuable time. I wish to thank the organisers of this seminar and wish you all success in your fruitful deliberations.

Bangladesh Country Paper

Dhaka THE BANGLADESH TIMES in English 29 Jan 83 pp 1, 8

[Text] Bangladesh on Friday called for joint efforts and planning by the Third World countries to overcome the problems arising out of one-sided dependence on the big western news agencies.

The call was contained in the country paper presented at the on-going regional seminar on "Flow of information among South Asian countries" in Dhaka.

The paper maintained that heavy dependence on western news agencies led to presentation of any international problem or issue through western view points.

Two business sessions were held on Friday, Mr N.L. Chawla, Director, Indian Institute of Mass Communication presided over the morning session while Mr A.B.M. Ghulam Mostafa, Secretary, Ministry of Information and leader of the Bangladesh participants at the seminar chaired the afternoon session.

The Bangladesh country paper which gave a comparative role of the international news agencies and agencies of the regional countries said that 65 percent of the international news came from the major international news agencies which were known as big four--AFP, AP, UPI and Reuters. Only one-fifth of the international news came from national news agency of the South Asia region, it said.

The country paper presented position regarding to the coverage of regional news in two major Bangladesh national dailies. It mentioned that reports about the regional countries hardly gave attention to the development in the sectors like agriculture, industry, health, science and education in these countries. General emphasis was given on foreign relations, he said.

Bangladesh hoped that Third World countries would achieve success to and dependence on the mass communication and develop an information media free from distortion and deficiency.

The business sessions also formed a drafting committee for the preparation of the recommendations to be adopted at the concluding session today (Saturday).

Reception

BSS adds: The Jatiya Press Club on Friday held a reception in honour of the foreign and local participants in the PIB-UNESCO sponsored seminar on the flow of information among South Asian countries.

President of the Club, Mr Abul Hashem spoke briefly welcoming the guests while Mr N.L. Chawla, Director, Indian Institute of Mass Communication replied on behalf of the participants.

Information Secretary Mr A.B.M. Golam Mostafa, Chairman of the Press Institute, Mr Abdul Wahab, editors of the national dailies and news agencies and members of the club were present on the occasion.

Information Secretary's Speech

Dhaka THE BANGLADESH TIMES in English 30 Jan 83 p 5

[Excerpts from speech of Information Secretary Mr A.B.M. Ghulam Mostafa at the inaugural session of the PIB-UNESCO Regional Seminar on "Flow of Information along South Asian Countries"]

[Text] I am delighted and indeed honoured to be able to speak a few words at the inaugural session of the Seminar on "Flow of Information among South Asian Countries." We are happy to note that Dhaka has been selected by UNESCO as the venue of this Seminar which, we believe, will go a long way in bringing closer the countries of this region not only in the field of communication and information but also in other fields. I would like to thank the UNESCO and the Press Institute of Bangladesh for organising this important Seminar. On behalf of the Information Ministry of Bangladesh Government may I also take this opportunity of welcoming the distinguished participants from our friendly countries and wish them a pleasant stay here.

The peoples in South Asia region have a common past. We are also following the common goal of trying to improve the socio-economic condition of the people within a short span of time. Despite national peculiarities we have many common problems and the ways of their solution may also be common. We can learn a lot from each other and share each other's experience. But this is greatly impeded as there is gross disparity in the flow of information among these countries.

Information and communication, as we all know, are assuming increasing importance in all matters of national life. It has a crucial contribution to make in all political, economic, cultural, educational and social change. If we can make use of this in a planned and meaningful way, we can achieve excellent results.

Increase of information flow among South Asian countries has a definite purpose. The present day trend is to relate information and communications with national development goals and strategies. Communication is no more a practice without a sense of direction. It is now essentially goal oriented and that goal is the overall development of countries.

We in Bangladesh fully agree with the MacBride Commission Report for fashioning a New World Communication and Information Order. This is essential if we want to reach the goal of a new world economic order. We would like to see that the media in the Third World countries play their due role in stimulating economic development, promoting social and cultural change in line with the aspirations of the people and forging national unity. We would also like to see that this role is played well and fully and that the present dominance of the transnational media who monopolise themselves in catering "all the news" and "all the analysis" to the "passive" developing countries is combated. We would like to see the improvement of technological base and skill in these countries.

The goal to increase information flow among South Asian countries cannot be realised without some positive actions. A number of measures may be considered desirable in this regard. First of all, the creation of facilities in the form of communication resource is an imperative need. All the countries in this region should have the technological facility and ability for both reception and transmission of messages. Unfortunately, many of them now are only capable of receiving messages. They do not have adequate facility to transmit them. It is, therefore, necessary to create as well as augment reception and transmission facilities at national and regional levels. The national news agencies will have to play the pivotal role in this regard and improve the transmission facilities. Where possible and feasible, the facility of satellite communication may have to be exploited to improve the capability.

There is also the need for setting up a regional news agency which can be conveniently linked to the national news agencies in addition to independent collection of information. This regional agency can act as a channel and be a useful purveyor of news and information among the countries of the region. The recent move for setting up Asian News Network is a step in the right direction. We would like to see that this institution grows quickly so that it can realise the objectives for which this has been set up. From our side we will be prepared to render full cooperation and support to this organisation.

The collection and dissemination of information about various countries alone will not be enough. This news will have to be published in newspapers. An important element of cooperation among the countries of this region will be publication of news, on a larger scale than at present, of other countries in the newspapers of another country. Features, commentaries, in depth news etc. on the activities, policies and programmes and success stories of various countries should be published liberally.

It is important that the journalists have first hand knowledge about different countries of this region. This will enable them to communicate more effectively. To achieve this, there should be more and frequent exchange of media personnel and administrators among these countries.

There is also the need to improve the professional competence and skill of the media people in this region. For this purpose, training programmes, seminars, workshops, etc will have to be organised on a larger scale. The various national Mass Communication or Press Institutes will need further strengthening. Some of the advanced institutes in this region may offer training facility to other countries in line with the arrangement under Technical Co-operation among Developing Countries.

Another area which needs our attention is the reporting of news about rural areas. There now exists imbalance in the coverage of news between urban and rural areas. The national news agencies and newspapers will have to pay greater attention to this aspect so that the activities and problems in the rural areas, the hopes and aspirations of the rural people are reflected in the national dailies.

I hope the communication experts and administrators present here would critically examine all the related issues and come up with pragmatic and valuable recommendations for ensuring greater flow of information among the countries of South Asia.

I like to thank you again for giving me this opportunity of sharing with you my ideas on the subject. Greater flow of information among our countries is a must. We are as one in our conviction that a greater and balanced flow of information between the developed and the developing countries as well as among the developing countries assures a promising future. We have confidence in our ability to achieve this goal.

Speech by Press Institute Chairman

Dhaka THE BANGLADESH TIMES in English 31 Jan 83 p 5

[Excerpts from the speech of Mr Abdul Wahab, Chairman, Press Institute, at the inaugural session of the PIB-UNESCO seminar on "Flow of Information among South Asian Countries"]

[Text] While it is more than right that such a Conference should take place and the countries of this region should know more about each other than about the distant West but such knowing should be positive and balanced and not picture post card views about each other's countries and also realistic without of course ignoring the aesthetic side. And earlier to that there should on the part of us journalists of the developing world a better knowing of their own countries.

According to a great Mystic Bengali poet, Lalan Shah: "While you do not know what is next door, why go you to Delhi and Lahore?" (Barir Pasher Nai Ko Khabar Kishar jonne Jac Delhi, Lahore).

This great truth does not of course distract from the knowing of the outer world and its importance but everything has to begin with what is immediately our own. This would make the gradually outward journeys more fruitful. Please do not misunderstand me. My only object is an ideal pattern of intercommunication between the regional countries.

As I have indicated before, this knowing has to be more purposeful and not so much merely telling each other, look what nice fellows we are. I hesitate to use the word "Constructive" here because this has already become in varying degrees a favourite of governments the world over so much so that like a cliche it seems to have become a substitute for thought insofar as hardly anybody defines who is to interpret. Another such word is "responsible." In this connection I can, at the moment, do no better than quote from the Macbride Commission's report itself where it says, "For the journalist, freedom and responsibility are indivisible terms. Freedom without responsibility invites distortion and other abuses. But in the absence of freedom there can be no exercise of responsibility."

According to the New Statesman of London it means "responsibility without power." Here I wish to point out most humbly that my object is not to point an accusing finger at any country or anybody but merely to refer to something widely present so that the increased flow of information which we can hopefully expect from this Seminar may lead to better reporting between the countries of this region and better articles and features.

As an old journalist I have been watching with increasing distress that the light of dissent with which Press Freedom is linked going out one by one in the few countries in Asia where it once was relatively found.

Then there has been the march of technology. It is not that I am against the advancement of science but in the world of the underdeveloped in the world we still take a starry eyed view of science without much realising its perils. In the final analysis everything depends on the use to which it is put. Matthew Arnold, famous English poet and critic hated machines but he still used them. Many people jibed him over it. But in the end he made this point tragically though when he died by falling from a tram while on his way to visit an ailing daughter.

At the moment a pathetic belief seems to be prevalent that telecommunication with its enormous rapidity and scope or rather the newly emerged science of communication can solve many problems. At the moment the word is "mass communication." Of universal import in this context is a statement by the Secretary General of the United Nations that "failure to assert the primacy of policy over technology is an increasingly dangerous phenomenon in the modern world."

Meanwhile, there appears to be another handicap in the interest of better journalism in this region and that is the scholasicism and all that it entails in its European medieval sense that appears to have crept in due chiefly to American influence and methods into what is called nowadays training in mass communication or journalism.

Yet another danger is advertising and its quality which too is based on Western patterns of mainly useless consumerism and hedonism backed by big business and affecting even cultural patterns which took centuries to evolve together with the values they represent. In this regard we must not also forget that Western civilization is a dying one, "perfect to decadence."

We the peoples of this region belong to the East and to get the best in any field we must not forget our own traditions if cooperation in the flow of news between our various countries is to be more effective and which will, I am sure, help us overcome the Western preponderance in the field of news with their slants and tilts and the many pronged thrust of their multinationals and the frivolities and pieces of facetiousness and the tongue-in-the cheek items them sometimes put out. Here one thing must be mentioned: why do we use such of them at all? Surely there can be no compulsion. My main point is that must there not only be greater outflow and inflow of news between the countries of this region which represent one

fourth of mankind but it must be better and still better quality too and journalistic education apart from universal basic principles may profitably be recast to suit our own respective geniuses and chiefly we in the East must rediscover our own souls if we have on to the extent that we have lost them.

These are days of narrow specialisation and it was well said once in journalism quarterly of the states that the journalist is the last great generalist left in the world. For this we need journalists with still more good, broad general educational and intellectual backgrounds—the more the better. Especially is this needed in the world of the developing where a journalist may need to turn his hand to anything that may be needed.

Report on Declaration

Dhaka THE BANGLADESH TIMES in English 30 Jan 83 pp 1, 8

[Text] The three-day regional seminar on "the flow of information among the South Asian countries" on its concluding day on Saturday adopted "Dhaka declaration" that recommended for setting up fault-free, quick and efficient transmission and receiving system of news and information for the South Asian nations.

The declaration recommended to all South Asian governments "in the strongest possible terms" to appoint a committee on communication and information within "South Asia forum" to create a regional media consultative organisation to study problems of flow of news within the region and take suitable steps for the purpose.

Delegates from Bangladesh, India, Malaysia, Nepal, Pakistan, Sri Lanka and Thailand attended the seminar. The seminar was jointly sponsored by the Press Institute of Bangladesh and UNESCO.

Briefing the newsmen at the end of the concluding session, Mr A.B.M. Ghulam Mostafa, Secretary, Ministry of Information and leader of the Bangladesh delegation at the seminar, said that the delegates analysed the present situation with regard to the flow of information among the South Asian countries and found that situation was not "very satisfactory."

The five-page "Dhaka declaration" in its preamble identified problems and prospect of cooperation among the South Asian nations relations to the news and information flow. The seminar in the declaration recommended a number of measures to be undertaken by the UNESCO, governments and newspapers and news agencies of the South Asian countries.

Mr Mostafa said that presently the flow of information among the South Asian countries was inadequate and defective tending to present an imbalanced, distorted and misleading picture. He said that delegates at the seminar felt the urgent need for improving the situation.

Mr N.L. Chawla, Director, Indian Mass Communication Institute and an Indian delegate at the seminar was also present at the briefing. Mr Chawla observed that a separate identity of the media in South Asia was emerging and hoped that the "Dhaka declaration" would go a long way in achieving a balanced information flow in the South Asia region.

Referring to the recommendation for creation of a regional media consultative committee, Mr Ghulam Mostafa said that the committee would help bring together the mediamen to study the problems of flow of information within the region and take suitable steps for purpose.

Restrictions

The seminar, in the declaration requested to all Governments of South Asian countries to "remove all restrictions on domestic coverage of news and travels by journalists for performing their professional duties."

The seminar, according to the declaration, also recommended that the respective governments might discuss in South Asia forum the possibilities and benefits of accuring from the increased coverage of regional news. It maintained that the South Asian countries have emerged as an entity with many mutual interests and common problems in the field of knowledge and information. Such problems could be tackled through better cooperative efforts, for which knowledge and information about each other was a prerequisite for purposes of future consideration and collaboration.

Biased Coverage

BSS adds: The declaration noted that on the one hand news imbalances were created by inadequate and often biased coverage of events by transnational news and information agencies, and on the other imbalances existed within the countries themselves due to limitations on coverage of information in the rural areas. It also noted that instances of imbalances were found in the flow of information from one country to another within the region.

The seminar considered that the flow of information among South Asian countries was in the interest of regional peace, amity and cooperation.

The seminar also requested the UNESCO to arrange training of journalists, photographers and technicians who would be responsible for writing news stories, features and informative articles, transmitting news pictures and maintaining and repairing the sophisticated equipment provided for the purpose.

The seminar noted that the peoples of this region need to know each other's aspirations and problems and the efforts to solve these problems. Such knowledge which is to be achieved through flow of information, would be mutually beneficial and would promote cooperation in accordance with the spirit of the UN Charter to which all Governments subscribe.

Main Hurdles

The seminar, therefore, recommended to all South Asian Governments in the strongest possible terms to accept forthwith the demands by the recognised professional bodies of journalists for scaling down the press bulletin service (PBS) rates of the duplex satellite channels to an amount not exceeding US dollar 200 per month. It observed that the exorbitant tariff rates imposed on the reception and transmission of news are the main hurdles in the way of the flow of information and therefore the removal of these hurdles by the Governments of South Asian countries is urgently needed.

Besides recommending to the South Asian forum to form a committee on communication and information, the seminar urgently requested the regional Governments to permit the journalists to carry their typewriters, cameras. tape recorders. cassettes and tape and other such essential equipment inside each other's countries.

The seminar called for encouraging import, export and exchange of informative newspapers and journals which it noted were essential for ensuring greater and better flow of information. It also called for allowing import of equipment, machinery and spare parts for transmission, reception and printing of news at concessional rate of duty.

The Dhaka declaration of the seminar urged the governments of the South Asian countries to encourage and support if necessary with the help of UNESCO development of rural press which it noted could mirror the life and problems of the villages in the region.

The three-day seminar was declared open on Thursday last by Information Minister Syed Najmuddin Hashim with a call to meet the challenge of imbalance in the flow of information between the developed and developing countries.

PLANS FOR LAUNCHING, EXPLOITATION OF SATELLITES TOLD

IRS-1 by 1986

New Delhi PATRIOT in English 19 Jan 83 p 8

[Text] Mangalore, Jan 18 (UNI)--India will acquire the capability to launch satellites in the 1000 kg class by 1987, Dr U.R. Rao, director of the Indian Space Research Organisation's satellite centre at Bangalore has said.

Speaking on the concluding day yesterday of the two-day science convention organised by the Mangalore station of the All India Radio, Dr Rao said space scientists were confident that with proper encouragement the country could even produce in the near future vehicles to launch satellites of the class of the INSAT.

He said Indian remote sensing satellite IRS-1, which was under construction, would be launched in 1985 or 1986. The satellite would have a higher camera range than the Bhaskara and would greatly extend "our knowledge on agriculture, forestry and mining." IRS-1 would be comparable to the Landsat satellite of the USA.

Dr Rao said Apple, the country's first experimental communication spacecraft launched by the Arianne launch vehicle of the European Space Agency in June 1981, was doing fine. He hoped that the satellite would continue to perform for at least another six months.

He said young space scientists in the country were doing very well and could compare with their counterparts in some of the advanced countries.

Computer Development Plans

Calcutta THE STATESMAN in English 3 Feb 83 p 11

[Text] Bhubaneswar, Feb 2--The Indian Space Research Organization has plans to send up a remote sensing satellite in 1986 for photo-geoligic and geophysical studies of natural resources in different regions and also for various other purposes like study of vegetation cover, land use and soil mapping.

This was disclosed by Mr M.N. Qureshy, director, Department of Science and Technology, Government of India at a workshop on natural resources management through remote sensing here yesterday. Mr J.B. Patnaik, Chief Minister of Orissa, inaugurated the workshop.

Meanwhile the Department of Science and Technology had undertaken a scheme to introduce computer technology for standardization of data on natural resources already collected and to make them readily available to planners, researchers and enterpreneurs. At present there is only one centre at Hyderabad for interpretation and analysis of photographs and other signals received remote sensing satellites.

Mr Qureshy said it had been decided to set up five more such centres at a cost of Rs 5 crores at Bangalore, Nagpur, Dheradun, Kharagpur and at a place near Bombay. The centre to be located at the Indian Institute of Technology, Kharagpur, would be responsible for interpreting and analysing data obtained from remote sensing satellites for the eastern and northeastern regions.

Simultaneously ground survey for collection of data on natural resources with socio-economic objectives would continue. The IIT, Kharagpur, had been entrusted with the task of making such surveys for the backward districts of Purulia in West Bengal and Koraput in Orissa.

A document released at the workshop stressed the need for an authentic data base and an efficient information data storage and retrieval system. It also underlined the growing demand for integrated and evaluated data resources to enable timely access of relevant information to policy makers, planners and entrepreneurs—both at the micro and macro levels.

The document, prepared by the Department of Science and Technology, referred to the absence of a centralized data bank. "Most of the available information is held in files and is scattered in many agencies and departments. Moreover, it is seldom compatible because of the lack of an institutionalised system of standardization. This state of affairs has resulted in huge data accumulation, a large part of which has remained underutilized," it added.

With a view to remove this deficiency, the Department of Science and Technology had decided to use computer technology and has "decided to have a pilot study aimed at evolving standardized formats and computer technology-based methodology for collection, storage, evaluation and dissemination of natural resources data, according to the document.

PROJECT DIRECTOR TELLS PLANS FOR INSAT 1-B

New Delhi PATRIOT in English 29 Jan 83 p 5

[Text] Bangalore, Jan 28 (PTI, UNI)--INSAT 1-B which will play the role of INSAT 1-A spacecraft is "getting ready for launch some time by the middle of this year," Dr R.M. Vasagam, project director of "Apple" satellite said here today.

"We hope its services would be available by the end of the year," Dr Vasagam said, addressing a workshop on communications.

The ISRO had abandoned INSAT 1-A, the first multipurpose domestic communication satellite which was launched on 10 April last year from Cape Canaveral, USA, in September following depletion of fuel and other constraints.

The INSAT 1 programme consisted of launching two satellites INSAT 1-A and 1-B. INSAT 1-B will now take the place of INSAT 1-A. It is expected to be located about 36,000 kms above earth at 94 deg longitude.

Mr Vasagam said the systems on the communication satellite APPLE (Ariane Passenger Payload Experiment) were working well and one round of experiments had been completed.

He said that despite the non-deployment of one of its solar panels, the satellite had successfully completed 19 months in orbit and had helped in a wide range of experiments.

Dr Vasagam said the satellite was recently used to provide a communication link to the flood affected areas of Gujarat. There was a possibility of using it in facsimile printing and digital communications.

Dr Vasagam said the satellite had been used in international communications also and certain important technical experiments, such as time division multiple access which would enable increased channel capacity utilisation and the spread spectrum multiple access to ensure security in communications, had been successfully completed.

cso: 5500/7073

INDIA

OFFICIAL REPORTS ON COMMUNICATIONS 10-YEAR PLAN

New Delhi PATRIOT in English 29 Jan 83 p 5

[Text] Bangalore, Jan 28 (UNI)--Telephones will be available on demand to all in the country by 1988 in areas where there is a telephone exchange if the 10-year perspective plan of the Union Communications Ministry is implemented in full.

Inaugurating a workshop on communications organised by the Association of Indian Engineering Industry and the Greater Mysore Chamber of Industry, Union Communications Secretary S.K. Ghose said the perspective plan which was scheduled to end by 1990 was being advanced by two years. At the end of the plan there would be no village without at least the public telephone facility within an area of five km. All district telephone systems would be automatised and linked to the national subscriber trunk dialling system, he added.

Mr Ghose said the Ministry was keen to introduce modern technology.

It was proposed to introduce fibre optics technology in telecom transmission in some major centres. Research in this sophisticated field of communications transmission at Pune had yielded satisfactory results. After introduction af major centres, the technology would be gradually introduced throughout the country, he said.

Mr Ghose disclosed it had been decided to set up a factory for the manufacture of 500,000 for public speaking equipment in collaboration with a French firm shortly. Another factory of the same capacity would be set up within this decade.

According to Mr Ghose, since the rural telephone system in the country was "mostly on paper," it had been decided to modernise the system by 1992-93 on the basis of multiaxis radio system.

He ruled out the possibility of bifurcating the telecommunications and the postal services saying it should not be attempted as it would bring about the death of postal services.

cso: 5500/7073

PAPER REPORTS LATEST DEVELOPMENTS IN COMPUTERS

CMC's Accomplishments Told

New Delhi PATRIOT in English 21 Jan 83 p 7

[Text] State owned Computer Maintenance Corporation (CMC) had taken up the task of designing and developing software for three dedicated systems to be used in the field of power, railway and meteorology, reports UNI.

The dedicated systems are meant for a computerised load despatch system for the distribution and monitoring of electricity, a railway freight management system and a meteorological early warning system.

The most significant of the research and development projects of the CMC is the development of phonetic based keyboarding and coding scheme which is an essential part of word processing and electronic composition in Indian language scripts. The phonetic coding scheme has significant commercial implications for printing of books and newspapers in Indian languages. besides providing transliteration facilities.

According to CMC sources, an eight-bit microprocessor is currently being developed to execute the scheme.

A delegation of CMC engineers have gone to Saudi Arabia to provide a total range of services such as hardware maintenance, software support, application development and site consultancy for maintaining certain range of systems in the Middle East for a Saudi company.

In order to tap the foreign market, CMC has reached an understanding with Telecommunication Consultants India Limited, another public sector enterprise, to collaborate in responding to world tenders for turnkey jobs.

Last year significant progress was made in developing a portable date base management system (DBMS) named Amin for implementation on 82-bit computer, and a portable DBMS for implementation on a 16-bit computer. This is the first time such systems are being developed in India.

CMC's turnover has doubled in the course of the last four years and has exceeded the Rs 10 crore mark. The company has shown steady profit since 1979 and the net profit for 1981-82 was Rs 68.94 lakhs as compared to Rs 45.25 lakhs in the previous year.

A maiden dividend of Rs 50 per share of Rs 1000 each was declared for the year ended 31 March 1982 on its paid up capital of Rs 5 crores.

Latest Technology Sought

New Delhi PATRIOT in English 21 Jan 83 p 7

[Text] Ahmedabad, Jan 20 (PTI) -- India has floated a global tender for purchase of technology to manufacture the latest, state-of-the-art computers to meet the country's requirements and hopefully these would be in production by 1984.

"We are looking for those production technology which would lead to further development in our country and not just a wholesale transfer of designs without any real transfer of technology," Union Deputy Minister for Electronics, Dr M.S. Sanjeevi Rao said yesterday.

Inaugurating the Computer Society of India's annual convention here, Dr Sanjeevi Rao who is also chairman of Electronics Commission, said the commission had decided at the same time to set up a CPU (Central Processing Unit) capability of the order of the TDC-332 plus computer. The TDC-332 manufactured by the Electronics Corporation of India Ltd (ECIL) has been found to be quite satisfactory and has been installed in scientific and commercial organisations."

Dr Rao said they had also approved the setting up during 1983 of Indonet, a data communication network of high performance computers in Bombay, Calcutta, Delhi and Hyderabad to provide an integrated data management information system for national organisations. To be set up by the public sector, Computer Maintenance Corporation, Indonet would in addition provide access to some of the well-established computer networks and data banks abroad.

Steps would also be taken for a transportation network and edunet connecting educational institutions around the country.

Dr Sanjeevi Rao dwelt at length with the Government's policy of liberalisation in the import of computers and took the occasion to attack the computer industry for 'direct or indirect sale of systems imported ostensibly for soilware export' questionable domestic trade in computer time and "depressing scenario" in indigenous manufacture of mini and microcomputers.

Besides, "to my knowledge, there is not single application which is being developed by our manufacturers, by our consulting houses, to solve the massive problems of economic development of hunger, of education, of health care," he said.

NEW PHONE EXCHANGE INSTALLED; BOMBAY STATISTICS

Bombay THE TIMES OF INDIA in English 25 Jan 83 p 1

[Text]

BOMBAY, January 24.

BOMBAY Telephones is installing a new 10,000-line exchange with the code '812' at the Malabar Hill exchange which was damaged by a fire on December 30. The next exchange is expected to be operational in six months.

operational in six months.

Installation work on the new exchange has already begun. So has work to connect 4.000, of the 9,500 subscribers of the damaged '812' exchange, to the Byculla exchange which will have excess capacity when the second 10,000-line Mazagon exchange is commissioned in April.

Mr. P. C. Jauhari, general manager

of Bombay Telephones, told a press conference today that after providing alternative connections from the adjoining exchanges, 5.600 subscribers of the '812' exchange were today still without telephones.

On the other hand, 1.855 homes in the area had 3.102 telephones from the '822' exchange, If these "extra" 1.247 telephones were transferred to the '812' subscribers, the number of those without a telephone would be reduced to 4.400 subscribers. He therefore appealed to those with more than one telephone to volunteer to share the extra ones with those who had non till the Mazagon exchange was commissioned.

The general manager said the legal

implications of temporary transfers were being studied and a decision would be taken shortly.

The general manager added that if requests for "third party extensions" in the same building were received from subscribers of '822' exchange, the matter would be accorded the highest priority.

About the "822" exchange, which was restored on last Friday, he said that a few subscribers who had been provided temporary connections would get back their old numbers by next Friday.

The general manager said that the Malabar Hill exchange would have a

total of 40,000 lines by the middle of next year. The existing waiting list was a mere 2,500 compared to other areas in Bombay. Therefore much of the excess capacity would be used for giving relief in the Gamdevi area, he said.

A new 10,000 line Hitachi equip-

A new 10,000 line Hitachi equipment was also scheduled to arrive here by the end of February for expanding the existing '822' exchange. The new code would be '823'. This job was expected to be completed in a couple of months.

The post and telegraph committee, which was probing cause of the fire had recommended a mobile telephone exchange to cope with such emergencies.

MOROCCO

BRIEFS

UNDERWATER TELECOMMUNICATIONS CABLE—Within the framework of the telecommunications year, the inauguration took place at Asilah today of the underwater cable Atlas linking Moroco with Portugal. The system of telecommunications via the underwater cable will link Morocco, Portugal, West Africa and Latin America and will also link with the cables which link Tetouan with Europe via France. Thus it is a national and regional project and is of interest to the Mediterranean, Europe, West Africa and Latin America via Brazil. This proves the important strategic position our country occupies for acting as a center for international communications. In addition to our country and Portugal, France and Italy participated in the project. [Excerpts] [LD250837 Rabat Domestic Service in Arabic 2000 GMT 24 Feb 83]

BRIEFS

DIRECT DIALING WITH TEHRAN--TEHRAN, Feb 1--Tehran has been put on direct telephone communication contacts with Pakistan, Turkey and Australia from today. The establishment of such linkages coincides with the fourth anniversary of the arrival of Imam Khomeini, leader of the revolution and founder of the Islamic Republic, and the opening day of the "Ten-Day Dawn" ceremonies. The public relations office of the Telecommunication Company of Iran while announcing this said that telephone contacts can be made from 0600 hours tomorrow with codes of 0090 for Turkey, 0092 for Pakistan and 0061 for Australia. [Karachi DAWN in English 2 Feb 83 p 9]

DIRECT DIALING FROM LEIAH--MULTAN, Feb 3--Direct dialing system of telephone from Leiah, Lahore and Dera Ghazi Khan will be introduced soon. This was disclosed by the Deputy Martial Law Adimmnistrator, Multan, Maj-Gen Shamim Alam Khan while addressing Federal and Provincial Councillors and divisional and district heads of Government Departments in Canal Rest House at Leiah on Saturday. He advised the officers and councillors to complete schemes within the stipulated period. [Karachi DAWN in English 4 Feb 83 p 7]

MULTILINGUAL TELEPRINTER CIRCUIT—Pakistan is expected to be linked to a multilingual teleprinter circuit from 23 March. The languages also include Urdu and Arabic. This was stated by a spokesman of the Post and Telegraph Department while talking to newsmen in Peshawar on 21 February. He said an international subscriber dialling public call office has been established in Peshawar on an experimental basis to provide telecommunication facilities with 15 foreign countries. [Text] [Karachi Domestic Service in English 1700 GMT 21 Feb 83 BK]

BRIEFS

SPACE COOPERATION WITH FRANCE--Riyadh, Feb 16 (SPA)--The building of three Arab space satellites by Aero-Spatiale Company of France is going ahead without any delay, Minister of Posts, Telegraphs and Telephones Dr Alwai Darwish Kayyal said here today. In a statement to SPA, Dr Kayyal said Arab countries had also concluded contracts on establishing earth stations that would receive satellite transmissions. He added that out of concern to follow-up all stages of the project, he had visited the headquarters of the French company accompanied by Arabsat's director-general Dr Ali al-Mashat. [spelling as received] Dr Kayyal also said during the visit he held talks with his French counterpart on promoting cooperation between the two countries in the field of telecommunications. Saudi Arabia is the biggest contributor to the project and Riyadh will be the headquarters of its control stations. [Text] [LD161658 Riyadh SPA in English 1455 GMT 16 Feb 83]

SUDAN

BRIEFS

TELECOMMUNICATIONS PROJECTS--Khartoum, Feb 6 (SUNA)--Thompson Company of France which operates in the field of telecommunications will execute the rehabilitation of a microwave network between Port Sudan and 'Atbarah. The company will also build an earth satellite station in Port Sudan as part of French Government aid of 12 million dollars. The project is expected to be executed within six months as from the day of the signing of the agreement. The agreement was signed last Tuesday between the corporation for telecommunications and Thompson Company of France. When completed, the microwave network will use solar energy instead of ordinary fuel. The network will use communications between the areas through which it passes. It will also ease communications between Egypt Arab Republic and the Sudan besides the microwave network in Jiddah. Engineer Hasan Ahmad Hidirbi Chairman of Board of Directors and General Manager of the Public Corporation for Telecommunications, signed for the Sudan and a representative of Thompson Company signed for France. [Text] [Khartoum SUNA in English No 4393, 6 Feb 83 pp 3-4]

INTER-AFRICAN AFFAIRS

HEAD OF SAFRITEC DISCUSSES TELECOMMUNICATIONS PROBLEMS

Abidjan FRATERNITE MATIN in French 3 Feb 83 p 19

[Article by Diaby Aboubakar]

[Text] On the occasion of the seminar recently held in Algiers by the Pan-African Telecommunications Union on the encouragement and development of telecommunications industries in Africa, Kone Bangali, former minister of posts and telecommunications and presently president and director general of the African Communications and Technology Studies Company (SAFRITEC), gave a lecture on the subject: "Problems in the Development of African Telecommunications."

Kone Bangali made reference to a report of the World Bank entitled:
"Accelerated Development in Africa South of the Sahara: an Action Program,"
which states that: "Agriculture is at the heart of African economies. Most
of the people make their living through agriculture, which accounts for 30
to 60 percent of the Gross Domestic Product in most of the countries in the
sub-region." This led Kone to ask: "Does Africa, which is presently hungry
and thirsty, really need telecommunications for its overall development?"

Having made this point, the lecturer then reviewed the existing African telecommunications network. He said: "This network is characterized, among other things, by a low density of telephones, an unsatisfactory level of service, a stock of equipment designed for business and long-distance traffic, a concentration of equipment in urban areas to the detriment of rural zones, and an insufficient number of qualified personnel."

Manufacturing Era

However, he continued, this picture of the present situation "could become a means of achieving progress, however little the political will and economic means combine to ensure the development of telecommunications, so that they may contribute effectively to general development."

Recalling the objectives of the decade from 1978 to 1987 (among other things bringing up the density of telephones from 0.4 to 1.0 telephones per 100 people and ending up with 20 telephones available for every 100 people), the lecturer emphasized the need for planning in terms of needs and resources.

Without ignoring the numerous efforts which have been made in this direction through the work of the Dakar General Telecommunications Planning Commission, including the project for the development of a Pan-African telephonic network (PANAFTEL), he deplored the lack of realism in certain studies such as those which led to the establishment of RURAFRIQUE [Rural African Telephone Network].

In the light of this analysis and after briefly recalling the overall concept of the telecommunications network in our countries, Kone presented an inventory of existing technology in this very interesting area.

Aware of the fact that without fully mastering this technology, over which the Western countries have a monopoly, there will be no independence in terms of telecommunications, particularly during the present international recession, Kone concluded his presentation by touching on the important problem of technology transfer.

He made the point that "the objective to be sought should now be to go beyond the stage of providing services, such as 'refining petroleum,' and really enter the stage of manufacturing the components of the African telecommunications network."

5170

BRIEFS

'ELBC' ANNOUNCED IMPROVEMENT IN TRANSMISSION--Liberia's national radio station, ELBC, can now be heard in all parts of Liberia on a regular basis. The radio station is also transmitting to all parts of the world. This was disclosed recently by LBS [Liberia Broadcasting System] Director General Alhaji Koroma. He said the nationwide service is the result of gradual assimilation of technology and hard work since the establishment of ELBC in 1960. With some technical adjustment on its 50 kilowatt transmitters, ELBC now operates from morning until midnight on the shortwave band. In the daytime, the station can be heard on 6.090 MHZ in the 49 meter band and and at night ELBC is heard on 3.255 MHZ on the 90 meter band. Before the present service, ELBC transmitted nationwide and worldwide only in the morning and at night. According to LBS management, reception depots have been received from Britain, Finland, Germany, the United States, Japan, Ethiopia, South Korea and a number of other countries. The LBS management says emphasis has been placed on local programming. [Words indistinct] will also feature prominently. [Text] [AB142136 Monrovia Domestic Service in English 2100 GMT 14 Feb 83]

MALAGASY TV TO BE 'VOICE OF PEOPLE'

Tananarive MADAGASCAR-MATIN in French 13 Dec 83 pp 1, 2

[Excerpts] Formerly the mouthpiece for a minority and recently a loud-speaker for a single party or the instrument of the administration in power, today RTM [Malagasy Radio and Television] professes to be the "voice of the people." This is a difficult task which RTM, from the mere public servant to the technicians to the director, is attempting daily with its rather pathetic control panels in fulfilling its often thankless mission of pleasing and satisfying the public to the best of its ability.

Thanks to its wealth of ingenuity, the television network, which has broadcasted 800 hours of programming this year as compared to just 580 2 years ago, has sometimes succeeded in producing marvels despite its 1 imited resources. In fact, as strange as this may seem (on screen), the two cameras in the studio used to film the television news are curiously missing their viewfinders. Nevertheless, through various manipulations the station's cameraman manages to provide a good picture—the special magic that comes from a supply shortage and of making the best of what is available.

The official count of 50,000 television sets in the entire country suggests that there are approximately 350,000 television viewers with their eyes fixed on the small screen every night. This figure was widely exceeded during the recent World Cup and during the high points of electoral propaganda. There was mention of 1 million television viewers.

The television network's modest resources are far from dampening the staff's enthusiasm, but in the long run they could have unfortunate results on program quality. However, it is not ideas which are lacking at Avenue Grandidier (network headquarters). Outdated equipment and cramped quarters are surely preventing this "giant" from soaring. France's donations are received here like a timely shot of oxygen; however, this aid is not sufficient when you realize that it would take at least 800 million Malagasy francs to completely equip a studio.

The versatility of the ten journalists responsible for keeping us informed is sometimes astonishing, such as the off-camera female announcer who analyzes the news from Lebanon or Iran and then comments on a Bordeaux-Nantes or a Len-Paris-Saint-Germain just as cleverly, as if you were

there. Although it is not going so far as to change its image, television here is in the process of getting out of a rut. Aside from a return of publicity to our small previews, third rate films are less and less a part of Wednesday and Sunday evening programming when they often compete with the ones shown in movie theaters. In any case, one would like to see some local productions (documentaries, films made for television, quality variety shows) which are sorely lacking at present. But, here again the lack of equipment comes up. The revolutionary administration should give this problem a little more attention, considering that television is a bit of a gold mine for the public treasury. In fact, the state collects approximately 3 billion Malagasy francs annually in licensing fees, not to mention the Fokontany's which collect 1500 francs on each television set. Finally, let us note that the Tolagnaro area can already get direct broadcasts from Antananarivo.

As for radio which, like television, can broadcast over the entire island, it has the advantage of being listened to in every Malagasy home. However, many complain of the quality of some broadcasts and of incoherent segments which more or less ruin programs. Also, a rescheduling of Saturday afternoon broadcasts would seem to be necessary, since this is the only time working people and students have a chance to relax and would like to hear something else, without returning to the pre-1972 "feeble" hit parades. On the whole, the heads of our national network can be proud because the various segments of the population are finally seeing one or more hours of programming devoted to them, even if this necessitates real juggling on the part of the program planners. Indeed, it is difficult to satisfy everyone at the same time. This is why the Malagasy authorities have decided to decentralize radio broadcasting: Toamasina already has regional radio which operates from 8 pm to 8:30 pm and, according to the head of RTM, Simon Andriamialison, in a few years all the faritany's will have their own stations. The medium wave's 75 KW and the short wave's 5 KW are still a fragile barrier to the flood of decibels dumped on us by foreign radio stations. Quality and quantity will be RTM's lifeblood. Isn't training and educating listeners almost from the cradle the way to prepare for the year 2000?

9693

cso: 5500/94

DETAILS ON TV INDUSTRY, COOPERATION WITH FRENCH GIVEN

Tananarive MADAGASCAR-MATIN in French 13 Dec 83 pp 1, 2

[Excerpts] Antananarivo—A second financing agreement for some 1.3 million French francs (approximately 70 million Malagasy francs) to equip the Malagasy Television studio for color broadcasts was signed by Madagascar and France at the Ministry of Foreign Affairs last Thursday. The Malagasy Government was represented at the signing ceremony by Bruno Rakotomavo, minister of information, ideological orientation and cooperativization, who is interim minister of foreign affairs, and the French Government by its ambassador to the Democratic Republic of Madagascar, His Eminence Paul Blanc. The secretary general of information, Mr Mamambazafy Armand; the head of RTM [Malagasy Radio and Television], Mr Simon Andrimialison; the head of the ILO, Denis Ranaivoson; as well as some officials of the Ministry of Foreign Affairs and close associates of His Eminence Paul Balnc were also present.

Most of the Work Is Done

Mr Bruno Rakotomavo praised French-Malagasy cooperation on this occasion. In particular, he said: "Mr Ambassador, what can we add to what we have already said when the first agreement was signed. Now we are signing a second agreement which brings France's total financing of color television equipment for Malagasy Television's studio to 2.8 million French francs. Most of the work is done. Now we are ready for the technicians to come in and complete the project. Due to the good cooperation that Malagasy and French technicians have displayed when they work together, I am sure that they will indeed complete this project in the same spirit and I hope that there will be no problems and that they will complete it on schedule, in other words 1 year from now, and that we will then be able to open a second Malagasy Television studio."

A Testimony to Loyal Friendship

In responding to this speech, His Eminence Paul Blnac also paid homage to the spirit and the nature of the cooperation existing between Madagascar and France. The French diplomat said: "Mr Minister, we are fortunate to be signing this second agreement following the visit of two Frenchmen who were able to work with high level Malagasy officials for 2 days and just to exchange views very freely without anyone always being able to separate what was work from what was just friendship and the simple pleasure of being together."

"This relatively small agreement is also interesting as an expression of preseverance. Two or 3 years ago there was the mobile video unit agreement; a month and a half ago there was the first part of this agreement for the studio and now we are signing the second part. When we signed the first part, we had the pleasure of learning a few minutes before we arrived that the steering committee had agreed to it. We had promised to meet again shortly, we are meeting again shortly and thus all of the assistance being contributed to enable RTM to broadcast in color is complete. It is no more than a matter of months."

"I feel that after seeing how the mobile color unit has worked, we do not have to worry; the studio color unit will work just as well."

"I also feel that we owe this to our cooperation on the equipment and to the perfect understanding which prevailed among the Malagasy technicians and the French technicians who came for brief or permanent stays. It is to this perfect understanding, to this perfect comprehension and to this common concept of their tasks that we owe the success that we have already achieved and of which I am convinced."

"Thank you, Mr Minister."

Technical Explanations

The technical details of this second agreement were furnished by the Ministry of Foreign Affairs' director of bilateral relations, Mr Paul Rakontondramasy, as follows:

"The document which has just been signed by Minister Bruno Rakotomavo and His Eminence Paul Blanc between the Democratic Republic of Madagascar and France involves the provision of a grant of 1.5 million French francs for color equipment for the Malagasy Television studio."

"As we know, Malagasy Television is currently broadcasting some 30 hours of programming per week."

"It has a rather outdated black and white production studio and programming is chiefly provided by outside documentaries."

"This grant will therefore enable us to have equipment to produce in color."

"The current TV equipment, especially the mobile video unit put together by the French production department in 1980 for 1.7 million French francs, was partially donated by France. France's grant of 1.3 million French francs for this second part of the agreement will enable us to obtain

certain equipment, especially video equipment, two cassette recorders, two turntables, and also studio furnishings, such as a series of units to hold video equipment, video spare parts and audio parts. It will also enable us to cover the costs of the operation, labor costs for installation and putting it into operation."

"As for the Malagasy share, it will provide premises for Malagasy Television and the facilities."

"This grant of 1.3 million French francs from the steering committee of the FAC [Aid and Cooperation Fund] is intended to cover all planned expenditures in this currency. The term of this financing is set at 1 year."

9693

NIGERIA

BRIEFS

KADUNA TELEVISION—Governor Abba Musa Rimi of Kaduna has announced that his government would establish its own television station "to provide alternative news perspectives." Declaring open the "information week" organised by the state ministry of internal affairs and information, Alhaji Abba said that №2m. had also been earmarked for the improvement of the services of the state radio, this year. [Text] [London WEST AFRICA in English No 3418, 14 Feb 83 p 445]

cso: 5500/97

COLOR TELEVISION BROADCAST LAUNCHED

LD031557 Belgrade TANJUG in English 1646 GMT 2 Mar 83

["Pool item"]

[Text] Victoria, MAR (SAP)--Television broadcast was launched in Seychelles in January with the inauguration of the first transmission in new year's day, by Radio Television Seychelles (RTS).

At this first stage of the project, the television broadcast using the Pal color standard, covers 40 percent of the population of this Indian Ocean archipelago.

President France Albert Rene said in his inauguration speech that television would educate the people in the interest of progress and national understanding.

"Our decision to introduce television into our country was based on our political belief that we have to use every means possible to educate ourselves so that we improve ourselves and understand each other," he said.

Radio Television Seychelles is at the start going on air at the weekends only, with a total of nine hours of broadcast on Fridays, Saturdays and Sundays.

The television programmes as on the national radio are in Creole, English and French.

The government has launched a campaign to import TV sets at low import tariffs to allow as many people to acquire a set for themselves.

RTS was admitted in January as a full member of the pan-African broadcasting body, the Union Des Radios et Televisions Nationals d'Afrique (URTNAL), at the organization's meeting in Algiers.

cso: 5500/109

COUNTRY PROBABLY NEEDS THREE SATELLITES

MBO21312 Johannesburg THE STAR in English 1 Mar 83 p 1

[Article by Peter Sullivan, political correspondent]

[Text] Cape Town--South Africa may be orbiting into the satellite age within a few years and is considering having its own satellites blasted into space.

A special committee is investigating the possibility of buying a satellite system.

The committee, under the chairmanship of Mr Rudie Raath, deputy post master general (telecommunications), is looking at a set of satellites costing R200 million.

While the space craft will be used mainly for telecommunications, the SABC [South African Broadcasting Corporation] will also use the satellites for broadcasts.

South Africa will not launch the satellites itself but will have this done for it by an overseas consortium.

It is believed the satellites will also be used by the SA Transport Services, the SADF and ESCOM [Electricity Supply Commission].

Nobody expects the satellite plan to get off the ground in the immediate future as there is a waiting list which could take a few years.

Mr Raath said the country would probably need three satellites.

One of them will be continually working in space, the second will be in space on standby in case problems arise with the operating one and the third will be on the ground ready to be launched if both the others have problems.

The satellite would have a geo-static orbit, meaning it would remain in one spot above the earth.

The proliferation of satellites has given rise to grave warnings that other countries could place geo-static satellites above South Africa and beam television programmes straight into homes.

There was a fear at one stage that Russia intended beaming TV live into South Africa but this rumour is now being discounted.

The SABC has a senior member on the committee investigating satellites for South Africa.

MORE ON PROPOSED COMMUNICATIONS SATELLITE

MBO20822 Johannesburg Domestic Service in English 0500 GMT 2 Mar 83

[Text] The Deputy Director General-Technical of the South African Broadcasting Corporation, Mr (Duggie Mills), says the corporation is looking into the use of space satellite systems for the direct transmission of television and radio programs to viewers and listeners in any part of the country.

Commenting on the possible introduction of South Africa's own satellite tele-communications system, he told Radio News that one of the attractions of the use of satellites was the ability to connect virtually any two points in the country. This, he said, had obvious advantages for news, actuality and sports coverage on radio and television. In addition, sparsely populated areas would be more easily served by satellite systems.

It was reported earlier that a committee under the chairmanship of the Deputy Postmaster General, (Dr Roodie Raath), had been appointed by the Minister of Posts and Telecommunications, Dr Munnik, to investigate the feasibility of launching a South African satellite. The Postmaster General, Mr (Bester), said in Cape Town that the committee's report will be highly technical and could take several months to complete. He emphasized that a 200 million rand satellite system for South Africa was a possibility and not a certainty at this stage.

BRIEFS

LOW-COST CAD--Computer graphics software specialists Skok Systems has beaten the Americans in developing a low-cost computer-aided design (CAD) system. Now it wants to sell it where it counts most--in America. The company, which has entered several overseas markets within the past six months, is to set up a subsidiary in the US this year to market the system and will plough R1-million into launching it there early next year. To date export business-mainly to the UK, Germany and the Far East--has been worth R100 000 (software only) for the past six months; this year it will swell to about R500 000. 'But next year when we are in the US our sales will really soar. There are more than 100 000 small architectural, engineering and construction companies which are our main market," says the company's managing director, David Skok, a computer sciences graduate. He has steered the firm on its trailblazing course since 1979 when it began developing its CAD system out of its previous specialism of numerical control systems for machine tools. is the first to develop a CAD system costing with hardware, under R100 000. Now, in conjunction with its hardware supplier Hewlett Packard, it has gone a step further with a R55 000 system which it will launch in a massive R250 000 launch at Sun City at the end of this month. [Text] [Johannesburg SUNDAY TIMES-BUSINESS TIMES in English 13 Feb 83 p 5]

COMMUNICATIONS SATELLITE STUDY—A committee has been appointed by the Minister of Posts and Telecommunications, Dr L.A.P.A. Munnik, to investigate the possibility of launching a South African satellite. The Deputy Postmaster General, Dr (Roodie Raath), who is chairman of the committee, said South Africa has made use of an overseas service for telecommunications purposes until now. The committee will now investigate whether South Africa can launch a satellite for domestic purposes. South African Broadcasting Corporation officials are also serving on the committee. [Text] [MB011300 Johannesburg Domestic Service in English 1115 GMT 1 Mar 83]

NORDICS' DIFFERENCES ON TELE-X MAKE PROJECT DOUBTFUL

Stockholm SVENSKA DAGBLADET in Swedish 1 Feb 83 p 2

[Editorial]

[Text] Nordsat is one of the most promising Nordic joint projects ever to be torpedoed. Nevertheless, the satellite has certain aspects that were quite revealing in terms of Nordic cooperation. It would have meant a higher level of technology in the Nordic countries in a field of the future. The many TV channels could have increased considerably our knowledge of the Nordic countries and greatly increased the cultural exchange in our part of the world. Nordsat also would have made it possible to provide minorities with TV programs in their own languages—Swedes in Finland, Finns in Sweden, and Lapps in the Nordic Arctic regions.

The Danes abandoned the Nordsat project. Our neighbors to the south already receive TV programs from several countries, while many believe that a second Danish channel should be commercial. It also could be said that many in Finland, primarily for foreign policy reasons, were not especially interested in satellite television over whose programing they had little control.

Thus, Nordsat became Tele-X, which also could complement a future, although still uncertain, Nordsat. Sweden has been the driving force behind this satellite, which would be produced in conjunction with Norway and Finland. Just before the Nordic Council's session, this time in Oslo beginning on 21 February, the planned cooperation seems to be in trouble.

Suddenly Norway has become more hesitant. Norway's bid is not especially enticing to the Swedes. Norway seems to be sticking to its demand for 26 percent of the industrial production for the proposed Tele-X, while financing only 10 percent of the project. The Swedes have linked Tele-X with continued studies on Nordsat--without Tele-X there will be no study.

Finland has adopted a wait-and-see attitude. From a purely technological standpoint, there is strong interest in the joint project. Tele-X could supply TV programs for Swedish-speaking people in Finland and Finnish-speaking people in Sweden. Thus, cooperation even without Norway could be appealing.

In Finland, however, the debate over Tele-X has collided with plans for a

so-called coastal channel in Finland for predominantly Swedish towns. The new culture minister, Arvo Salo, has taken the opportunity to point out that Tele-X could replace the costly coastal channel. There has been a strong reaction among Swedish-speaking Finns against this idea, however.

Now the politicians must get together and try to salvage something positive from Tele-X which, in any case, is a step forward in this field for the Nordic countries. There has been much talk of increased technological cooperation in the Nordic countries, but little progress has been made. It would be unfortunate if Tele-X also were torpedoed.

9336

SWEDEN PRESSING NORWAY FOR GREATER TELE-X CONTRIBUTION

Oslo AFTENPOSTEN in Norwegian 12 Feb 83 p 4

[Article by Morten Fyhn: "Sweden Wants Norwegian Money for Nordic Tele-communication Satellite"]

[Text] Stockholm, 17 February--Sweden now wants to increase the pressure on the Willoch government to cause it to invest more money in the Nordic satellite project Tele-X. But at the same time the Swedes seem to be reconciled to Norway's share being less than 26 percent, as the present agreement specifies.

Olof Palme has resumed an old tradition in Sweden with regular meetings between the prime minister and leaders of the other Riksdag parties. At the first such meeting on Thursday Palme made sure that he had full support from the others to pressure Norway in the current negotiations.

There have already been several direct contacts between Palme and Willoch on this matter. Now the Swedish prime minister will probably make new contact. The two will meet next week in Oslo in connection with the meeting of the Nordic Council. If there is not a solution before then, Palme will be very glad to have the matter decided as soon as possible.

Tele-X is an industrial project which they have invited Finland and Norway to participate in. After negotiations at the civil servant level there was agreement that Norway would pay 26 percent of the costs and Finland 10 percent. In return the awarding of the industrial contracts would be correspondingly large.

The conflict over Tele-X flared up when the Willoch government informed Sweden that Norway would not pay more than 10 percent of the costs, and at the same time would continue to have 26 percent of the industrial contracts. The Swedish reaction to this Norwegian move disclosed much bitterness, and at first they were not willing to discuss a reduced Norwegian share. There is disagreement between Palme and Willoch on what was finally agreed to between the two countries on the civil servant level.

Now, however, Sweden seems adjusted to a compromise with Norway, but they do not agree that Willoch will get away with paying only 10 percent of the costs, while leaving the industrial share at 26 percent. From the Norwegian side they have suggested 15 percent as a reasonable solution, but that does not seem to be acceptable to Sweden.

According to the newspaper DAGENS INDUSTRI Palme has offered a compromise suggestion to Willoch which includes both reduced Norwegian expenses and a smaller share of industrial contracts. On Thursday Palme was not willing to say anything about the contents of his suggestion. On the contrary he made sure of political support from all parties to increase the pressure on Norway.

It is already clear that Finland is willing to increase its share in Tele-X. The Finns will be able to take over where Norway is retreating. It is especially Elektrisk Bureau in Norway which benefits from participation in Tele-X, but also Raufoss, Kongsberg and Norcem have an interest in Tele-X. According to DAGENS INDUSTRI Palme's compromise suggestion means that Elektrisk Bureau's share will remain unchanged, while the others will be reduced.

Tele-X has already created large problems in Norwegian-Swedish cooperation. If Norway finally withdraws from the project, there is the danger that the much larger Nordsat project will never take place. The interest in Sweden for Nordsat is not intense.

9287

FRENCH-CANADIAN-BELGIAN-SWISS GROUP SUGGESTED FOR DBS MARKET

Paris LE MONDE DIMANCHE in French 9 Jan 83 p VI

[Article by Michel Anthonioz, chief of the publications service of the National Audiovisual Institute: "A Francophone Audiovisual Galaxy"]

[Text] Direct broadcast satellites will make it possible to cover Europe. Francophone television companies must organize to take advantage of it.

Will the French direct television broadcasting satellites (DBS) [1] end up like the Concorde? The origin of the French-German project TDF 1-2-TV-SAT is well known: it was during a visit of German engineers to China, that the highest authorities of the government solicited the European industry for the construction of a DBS network. Today, this "Chinese syndrome" seems to be weighing heavily on this program devoted to the exportation of technology.

The contest between Ariane and the space shuttle, on one hand, and the negotiations for Europe's audiovisual space, on the other hand, have placed engineers and diplomats on the front lines. In the meantime, the men and women who are the television makers, and the television viewers, are watching these maneuvers without understanding their rules or knowing their stakes.

And yet for public television, DBS represent the greatest challenge of its short history. As we know, nature abhors a vacuum: no matter what swords are brandished, with or without home cabling, it is unthinkable that all or part of the channels opened by the satellites would not be used. If public television does not make its claim, there is no reason to refuse the concession to private companies. The problem today is no longer to know whether or not it is legitimate to stop the launching of the Luxembourg satellite [2], but rather to organize the production of programs and the charter of the organs which might broadcast through the French satellite.

However, the government can pursue this matter only with prudence, because it is aware that the advertising market is not flexible, and that any new advertising load would risk to unbalance a structure which is already fragile. But since the government refuses both to increase royalties and to create

"first class television" through assessments, how can it finance these new television programs which would prompt viewers to invest in equipment (purchase parabolic antennas) or services (cable subscription)? [3] Certainly not by merely "duplicating" the TFl and A2 programs. Is this an insoluble problem?

All the specialists agree that the wild proliferation of private stations occurring in Italy is a deterrent, and are envious of the mixed English system that smoothly organizes the relations between public service and private producers. But the opening, even if planned, of the private sector is not a panacea either; production costs have become such that it will be increasingly difficult for anyone to produce dramas and series if they remain limited to the economic boundaries of their markets. National independence, in the audiovisual field as elsewhere, is implicated by economic solidarities against which ideologic movements are powerless.

International Subsidiaries

In this context, how can one avoid noting the occasion offered by satellites, to expand production structures while diversifying audiences, the approved investments being amortized over much larger populations? In the 1990's, three audiovisual galaxies will coexist: the anglophone galaxy, which threatens to engulf a large portion of Northern Europe; the hispanophone galaxy, with the possibilities offered in Latin and Central America; and lastly, the francophone galaxy. Satellites enable us to expect one or even several transcontinental francophone networks: the inauguration of telecommunications and direct broadcast satellites is not a pipe dream. Experience has shown that whatever techniques are used to dub the sound track, the language criterion weighs heavily in the viewer's selections.

Why then not create international-type subsidiaries of Belgian, Canadian, French, and Swiss companies which could compete with the major North American networks? Should such companies receive satellite channel concessions, they would offer viewers in those countries programs originating from parent companies as well as original programs.

These companies could have semi-public status and gather together private producers and public programming groups. Actual production would be carried out by a holding company, with programming provided in each country by national companies accountable to the authorities of each nation: in this way, these companies could freely tailor their programming schedules to the viewing habits of their public and to the existing competition.

This would result in a very flexible staggered system, similar to the one used every day for regional programs on FR3. The system would also solve the problem of time zone discrepancies over such a large geographic area. What programs might be available to the viewers of this, or these francophone chains? News, locally produced at first by geographic zones. For example, Canadian viewers would immediately tune in on European current events, as

reported by European journalists; the same would be true for French viewers and African current events seen through African eyes. In other words, fuller news coverage, comparable to what is offered on England's Fourth Network, or certain American cable networks.

Through Sponsoring

There would also be programs for specific audiences, or dealing with topics determined by acknowledged individual talents: for instance, children's programs from Canada and scientific programs from Switzerland. These would be regular broadcasts scheduled for the same week throughout the network. There would also be standard programming automatically financed through co-production: television films, cultural programs, or creative documentaries. Finally, there would be rebroadcasts of programs from parent companies, each country making programs available to the rest for other than domestic broadcasting.

How could such a system be financed? Through sponsoring of broadcasts and advertising: large advertisers cannot fail to be interested in investments that would give them single-step access to international air time. This will not unbalance advertising either in the press or in regional television, since the targets will not be the same.

Belgian, Canadian, and Swiss television figures who continually face very stiff competition from their bigger neighbors, heartily wish for a stronger francophone position. They would like to see more active circulation of programs and personnel, and regular exchanges that would animate this system.

A first step has just been taken: the three French networks, SSR (French Switzerland), and RTBF (Belgian television), are about to reach an agreement that would establish a weekly francophone program relayed by the OTS satellite. Because this satellite's signal is not powerful, it can only be received by the antennas of television stations and of cable distributors. A GIE (economic interest group) will soon be formed. This proposal, as part of the "foreign cultural project" formulated by the Directorate of Cultural, Scientific, and Technical Relations [4], will have the support of diplomats. But will it find acceptance among network executives, who are reluctant for instance, about buying programs from Quebec "because of the accent"?

Lastly, the francophone audiovisual sphere should find substance in the North-South exchange. The satellites will contribute to the circulation of television programs originating in francophone countries in Africa, the Near East, the Far East, and the Caribbean.

But one should be very careful in this area: while it is in the interest of economically developed countries to know the cultures of third-world countries as reflected by their television programs and their films, it is not in the interest of Africa, for example, to receive massive amounts of television programs originating in northern countries. Social and economic gaps are too wide, and cultural identities too fragile, for indiscriminate exposure to the pressure of programs from economically developed countries. Here again, what is needed is dialog and not one-way saturation.

The francophone audiovisual sphere must soon become an institutional reality. While it is up to politicians and diplomats to lay the foundations, it is up to television professionals to erect the permanent structures which will make it possible to circulate authors and works in all "French language locations." To open television to the French-speaking world means giving our country's television viewers access to new programs, but it also means placing francophone producers, directors, and programmers in an international context enabling them to strongly face a competition which promises to be as harsh in television as the one already experienced in the film industry. Can we afford to miss this challenge?

FOOTNOTES

- 1. Direct broadcast satellites send the television viewer in a specific area, television signals that he can receive with a parabolic antenna.
- 2. At the Geneva conference organized by the International Telecommunications Union in 1977, Luxembourg received a direct broadcast satellite frequency, which will widely overlap Germany, Belgium, and France. These three countries have expressed misgivings about the appropriateness of encouraging the launching of this satellite.
- 3. Recent French government decisions concerning cables and the very dense networks already existing in Belgium and Canada, suggest that this will be the selected orientation.
- 4. See LE MONDE of 3 November 1982: "Francophone Television Program on European Networks in 1983."

11,023

EUROPEAN AFFAIRS

SAT CONTRACT IN TUNISIA

Paris LES ECHOS in French 2 Feb 83 p 4

[Unsigned article]

[Text] SAT (Communications Corporation) has just been awarded a contract in Tunisia for installing 700 km of coaxial cable telecommunications lines.

The total contract covers the supply of cable and equipment for connecting Tunis to the Algerian border on one hand, and Gabes to the Libyan border, with a trunk toward Djerba, on the other hand.

The completion time of the project is 24 months, with the work scheduled to start in January 1983. A SAT spokesman indicated that he could not disclose the amount of the contract. In 1982, SAT contracts in Tunisia amounted to 55 million francs.

11,023

FOREIGN TELEVISION, LOCAL BROADCASTING ENDING STATE MONOPOLY

Commission Backs Foreign TV Receiving

Copenhagen BERLINGSKE TIDENDE in Danish 5 Feb 83 p 5

[Article by Lisbeth Knudsen]

[Text] Everything is now ready for the government to make its decision on a liberalization of the citizens' access to watch foreign TV and on the establishment of a nation-wide cable network for transmission of all kinds of communication, such as telephone, data and TV.

The government has been awaiting the report by the Media Commission on cable networks and foreign TV and satellites. The commission completed its work yesterday, and the results are expected to be dealt with by the government very quickly.

The majority of the Media Commission has chosen to recommend a so-called hybrid network in connection with a cable network solution. That means that new as well as previous technology will be incorporated in the new cable networks, and only with the gradual improvement of the technology will the final full-range network be established. According to the Media Commission, the present technology is not far enough advanced for the network to reach the individual subscribers. The commission expects that, by 1987, all major towns in Denmark will be connected with a cable network.

The Media Commission proposes that regulations be now carried through for the establishment of new joint aerial networks which will make it possible for them to be incorporated in a new cable network. The municipal limits in connection with the joint aerial networks will be lifted, and the connecting network between aerial networks will be operated by the telecommunications companies and the Postal and Telegraph Services.

According to the commission, 250,000 households will not for the first many years be covered by the new cable network on account of their location outside the urban areas. Therefore, the committee has reached the conclusion that a TV 2 cannot be established via the cable network but will have to be air-borne.

The Media Commission was finally to take a position on the reception of foreign TV in Denmark. Today, foreign TV may be received by private aerials and joint aerial networks, but the broadcasts may not be transmitted beyond municipal limits. The Media Commission wants to abolish that regulation. The same thing applies to legal restrictions in connection with the state monopoly held by the Danish Broadcasting Corporation.

Local Radio, TV Stations Tests Soon

Copenhagen BERLINGSKE TIDENDE in Danish 10 Feb 83 p 5

[Text] The Finance Committee has unanimously approved that Minister of Cultural Affairs Mimi Stilling Jacobsen give the final permission for local radio and TV stations tests. Sixteen municipalities out of the 43 which plan tests have contributed a total of approximately 6.9 million kroner toward the tests, and the Finance Committee has accepted that this will release a state subsidy of 6 million kroner.

When, last summer, the Finance Committee approved the proposal by then Minister of Cultural Affairs Lise Østergaard to spend 6 million kroner by way of state subsidy, the condition was that the municipalities provide a corresponding amount. That has happened now, although far from all municipalities have contributed funds.

The financial contributions by the municipalities to the tests will comprise aid to people unemployed on a long-term basis, which means that part of the contributions by the municipalities will be obtained via state subsidies to those unemployed on a long-term basis. That has also been accepted by the Finance Committee.

After the approval by the Finance Committee, it will now be the minister of cultural affairs who will be granting permission for the tests. The Copenhagen area, however, has a technical problem in that measures will have to be taken to ensure that the coming Danish local tests will not interfere with Swedish TV.

7262

FIRST FRG DIRECT TV SATELLITE TO BE LAUNCHED IN MARCH 1985

Frankfurt/Main FRANKFURTER ALLGEMEINE ZEITUNG/BLICK DURCH DIE WIRTSCHAFT in German 13 Jan 83 p 5

 \overline{A} rticle by K. T. Munich: "Progress Through Direct Reception From Satellite"/

/Text/ The first German direct-reception satellite TV Sat 1 will assume its location (19 degrees west above the Equator) in March 1985, if everything goes according to plan. It will provide three satellite channels. Channels 1 and 2 are planned for use by television; however, a final decision on the type has not yet been made. The third satellite channel will be used for 16 simultaneous radio broadcast transmissions to be provided by ARD German Television /A-lgemeine Rundfunkanstalten in Deutschland/, the Deutschlandfunk, and by RIAS-Berlin /Radio in the American Sector of Berlin/, and possibly by Deutsche Welle as well.

What this multiple program might look like, or better still, how it will sound, that was recently shown in a joint demonstration of the Federal Ministry for Research, the Federal Post Office, and the Telefunken corporation at the German Institute for Air and Space Research at Porz near Cologne. The European experimental satellite OTS-2, which is still in operation, was used to substitute for the not-yet-operative TV Sat 1. The ground station for program transmission to the satellite was at Oberpfaffenhof in Bavaria; the receiving station with a small parabolic antenna was located at the Porz facility. The results were astonishing: It was possible to receive the 16 programs of the federal broadcasting stations with absolute clarity and in first-class quality. There was no mutual interference. If necessary, it would even be possible to transmit different languages over two channels of a stereo program without any cross-talk taking place.

Once TV Sat 1 is in position, it will serve—depending on the size of the receiving station—an area either between the North Pole and southern Italy, or with a more simple receiving station an area between central Norway and Rome; in each case providing optimal sound quality. It is planned to provide the 16 programs with inaudible code signals, so that the receiver can have program—type buttons. This means, for example, that upon pushing the "News" button, the news can be heard immediately whenever a news program is on the air in any of the 16 programs. Similar provisions have been made for classical and entertainment music, pop, opera, and radio plays. The source of the transmission will be indicated by an optical symbol, such as RH /for "Radio Hesse"/, NGR /North German Radio/, GB /German Braodcasting System/, or RB /Radio Bavaria/.

As far as costs are concerned, the special demonstrator receiver from Telefunken, if built individually, would reportedly cost about DM 30,000; further development and mass production could reduce the price to less than DM 900. In addition, the above-mentioned parabolic antenna with special electronic equipment would be required. On a mass production basis and limiting reception to the German direct-reception satellite, that would add another DM 1,200.

The Geneva Satellite Frequency Conference of 1977 assigned to each European country, including small countries such as Luxembourg, Liechtenstein, and Monaco, one satellite location with five channels. Expectations are that by the end of this decade, a number of European direct-reception satellites will be in orbit, which undoubtedly will also transmit radio broadcasts. Then, Europe will once again have genuine long-distance reception with high-quality sound.

7994

FIBEROPTIC COMMUNICATIONS NETWORK GROWS IN FRG

Frankfurt/Main FRANKFURTER ALLGEMEINE ZEITUNG/BLICK DURCH DIE WIRTSCHAFT in German 25 Jan 83~p~5

/Article by 1s: "Will Fiberoptic Cables be Introduced as Early as 1985? Federal Post Office to Examine Transmission Reliability and Cost Effectiveness"/

/Text/ The German Federal Post Office will "promote and actively push" optical communications technology, State Secretary Dietrich Elias stated in Berlin, where the Post Office has now started to use a new generation of optical glass fiber cables on an experimental basis. From a technical point of view, the Post Office considers the new communications medium in a positive light, he said; it is now up to industry to resolve the question of economics. The "switches must be set this year, especially with regard to the pricing structure," the state secretary noted. If the new glass glass-fiber lines should indeed prove to be economically competitive with current copper cables and if their transmission capability is sufficiently reliable, the Post Office will install them in regional and superregional long-distance networks as control technology, starting in 1985.

Organizational preparations toward this end seem to have progressed relatively far in the participating companies as well. According to Berlin's Lord Mayor Richard von Weizsaecker, a contract for cooperation in a joint venture for the production of glass fibers in Berlin has been initialled. Also, informal preliminary discussions have been held with the Federal Cartel Office, a spokesman for that Office confirmed. Recently disclosed plans show that the participating companies are planning to invest DM 200-250 million in a joint production facility in Berlin, which will have an annual production of 100,000 kilometers of fiber.

In the experimental line used for the demonstration, impulses are transmitted over a distance of 16 kilometers without intermediate amplifiers. The transmission velocity of 140 megabits per second is considerably higher than in earlier field experiments. This corresponds to a transmission capacity of approximately 2,000 digital telephone channels or of a color-TV signal, including sound. Each of the participating enterprises, including AEG, Kabelmetal, Krone, PKI, Siemens, and SEL, have set up a fiber transmission line consisting of four fibers. Total cost of the Federal Post Office's experimental installation amounts to DM 6.6 million. The Post Office was

greatly satisifed with the results of the first measurements. This year, a glass fiber line will be installed between Hanover and Hamburg, at a cost of DM 42 million, Elias said. In addition, the Post Office is planning to install over the next few months a demonstration network for video conferencing.

7994

FINNISH FIRMS EAGER FOR ROLE IN NORDIC TELE-X SATELLITE

Helsinki HUFVUDSTADSBLADET in Swedish 18 Jan 83 p 9

[Article by Mardy Strom]

[Text] Space technology is at Finland's door. But we are still hesitating to let it in.

Although three firms have bid on parts of the Swedish Tele-X project, which is described in greater detail below, there has been no decision as to Finnish participation.

There is a general opinion, however, that Finnish industry must not miss the chance to join in a joint Scandinavian project now. The reason is that space technology is going to come regardless of what we in Scandinavia decide concerning these matters.

Should Finland go in for space technology?

That question is becoming a hot potato among us. A decision ought to be made quickly, because the Space Corporation in Sweden is already examining the tenders it has requested.

Those who do not want to participate in financing the Tele-X communications satellite--which is scheduled for launching as early as 1986--will also not get any morsels for their industry.

It is precisely industry that is especially interested. The feeling everywhere in Scandinavia is that space technology will be important in the future. Many countries have already made considerable progress with product development in that area, and if we in Scandinavia are to have any chance of competing with those who have already embarked on this path, we must really set to work.

It was pointed out in a report published 2 years ago by a working group on space technology that our industry cannot afford to disregard the opportunities offered by space technology.

The Ministry of Trade and Industry also regards Finnish participation in the Tele-X project as justified. At the same time, the ministry's decisionmakers

are aware that space technology cannot be developed without considerable government support.

Christian Andersson, advisory official at the Ministry of Trade and Industry, says: "The main thing now is to do what we can to increase our proficiency in the sphere of space technology." His words carry great weight in these matters. He himself has sounded out industry's interest in the subject.

He points out how important it is for us to be ready to start using new technology as soon as it is ready for use.

Up to this point, everyone is in agreement.

How Much Will It Cost?

But when it comes to transforming thoughts into specific decisions, unanimity immediately becomes more difficult.

Industry is pulling in one direction. Some representatives of industry are saying that instead of dabbling in the "button trade," we should be investing the necessary resources.

Others in the same category express themselves more cautiously, feeling that a Finnish investment of 35 million marks in a project that will run to 1.25 billion Swedish kronor (at prices in effect at the start of 1982) is adequate or maybe a little too much.

The Finnish companies invited by Sweden's Space Corporation to submit tenders for certain specified parts of the project all admit that Finnish industry has only limited capacity to respond. From that standpoint, Sweden's Space Corporation has not treated Finland as unfairly as the bitterest critics have claimed.

Moreover, our industry includes some members whose interest in high-tech production is more theoretical than practical.

Sweden's Starting Point Different

Christian Andersson of the Ministry of Trade and Industry says: "We must remember that Sweden's starting point is entirely different than ours."

Sweden made an independent decision to launch a test communications satellite in 1986. It then inquired into Scandinavian interest in participating and requested tenders for certain parts of the project from Norway and Finland, which had expressed a degree of interest.

"Sweden has been investing a couple of hundred million in space technology for a number of years, while Finland's effort has remained below 10 million. Moreover, Sweden is traditionally a country of high technology with traditions in auto manufacturing, aircraft production, electronics, and communications."

He says that Finland must not expect too much from its own participation, which is going to remain substantially below 10 percent of the total cost, regardless of what happens.

No Decision

The crux of the matter is that no decision on participation has yet been made. Finland has followed Norway's pirouettes. Despite big expectations, last Thursday's meeting in Oslo between Palme and Willoch did not lead to any results or decisions concerning Norwegian participation, and as a consequence, everyone concerned in our country knows that the issue has once again been put on ice, at least until the end of February.

That disturbs Nokia, Valmet, and Teleste, at least, since they have submitted tenders for parts of the project. The Swedes have let it be known that the project is urgent. If there is no Finnish participation, there are not likely to be any deliveries from Finland either.

The top-level meeting in Oslo was preceded last Wednesday by a meeting in Helsinki for the Government Officials Committee of the Nordic Council of Ministers.

That meeting also ended in a postponement of sorts. The problem is that in the Swedish view, Tele-X is a piece of the NORDSAT project. From the beginning, the position of the Swedish Social Democrats has been that there will be no talk about NORDSAT if Tele-X is not plugged into the system.

That is why the Tele-X discussions are stalemated. If Norway and Finland agree to participate and develop their space technology as part of Tele-X, there is the danger that Tele-X will soon come to cost so much that it will no longer be possible to consider other alternatives.

In Finland, at least, there is fear of being tied down in that way as long as the NORDSAT report has not been fully completed. From a purely theoretical standpoint, it will not be completed until 1 April 1984.

Hesitation

Kaj-Peter Mattson of the Finnish Broadcasting Corporation and Magnus Kull, an advisory official at the Ministry of Education, are two of the three Finnish representatives who took part in the meeting in Helsinki by the Government Officials Committee of the Nordic Council of Ministers.

Magnus Kull says: "We had to take a stand on going further with the technical preparations for NORDSAT." And he adds that those preparations include obtaining tenders for deliveries of technology.

"We were not in agreement. The technical-economic definition phase is expensive."

Kull notes that the Swedish Government has announced that Tele-X will be tested as a main alternative in the development of NORDSAT. As is known, one satellite for NORDSAT is not enough: there must also be a backup system that can be hooked up if something goes wrong.

The Tele-X satellite could handle that job. But there are other, perhaps less expensive alternatives.

Kaj-Peter Mattson of the Finnish Broadcasting Corporation notes that the issue of Finnish participation in Tele-X and the NORDSAT question are so closely linked that the one is now threatening to lead to the other.

"If we join in an arduous technical-economic definition phase, we will be tying ourselves down considerably.

"And we want to avoid committing our ministers before they are sure of the line they want to adopt," he says.

It is estimated that the technical-economic definition phase will cost 35 million Swedish kronor over 2 years, he says. Finland's share is 21 percent.

If we invest that sum, we will be running the risk of throwing away about 7 million marks as long as many basic questions remain unresolved.

Among them—to mention only the biggest questions at present—are the number of channels, a great number of legal problems, and the question of whether TV programs will be broadcast simultaneously.

Revolutionary Future Prospects

The Tele-X satellite is a Swedish project that will give Scandinavian communications entirely new dimensions beginning in 1986. Fredrik Engstrom, managing director of Sweden's Space Corporation, personally talks about the satellite as being experimental and preoperational. The reason is that satellite communications of the kind in question cannot be guaranteed without a backup system. With only one satellite in the air, there is no backup capability.

But the project is still costing 1.25 billion Swedish kronor at prices in effect at the start of 1982. The size of the project has given rise to doubts in Norway and Finland about participating. Sweden would like to see those neighboring countries take part both in the building stage and in the communications traffic that the satellite would make possible.

But Sweden, which holds all the strings, is naturally giving the best production contracts to Swedish industry, and some representatives of Finnish industry feel that we are being treated as a charity case and being assigned only the one-time items that will have no major market in the future.

The Swedish view that Tele-X should function as the backup system for the future NORDSAT satellite is increasing the doubts in Norway and Finland. There may be cheaper solutions.

On the other hand, industry's only chance to acquire know-how in the field of space technology consists of participating in the Swedish Tele-X project. No Finnish participation means no morsels for Finnish industry.

Concerning participation itself, there is considerable agreement—in principle. It is generally felt that a small percentage of participation is justified for reasons of economic policy.

HUFVUDSTADSBLADET was told by Fredrik Engstrom, managing director of Sweden's Space Corporation, that Tele-X will have two TV channels on board. There will also be one TV channel in reserve. That channel capacity will make it possible to introduce joint Scandinavian distribution of TV programs.

But just as important is the fact that the satellite will have two transponders for data, making data communication possible at very high speeds. Those speeds will be greater than anything we have on the ground at present.

The Space Corporation feels that the data market will be important in the future.

For example, the satellite may make it possible to print newspapers at a distance, hold videoconferences, and transmit such things as sports events for TV broadcast without each country being required to have cumbersome equipment on the spot. Engstrom talks about the "electronic office" with word processing systems, digital drawings, and data communications between offices that can be located at great distances from each other in the future but still operate as though they had only a wall between them. Control processes based on data processing will make it possible to guide production with robots over great distances.

In this system, distances do not influence costs. It is as simple to communicate over the distance between western Norway and northern Karelia as to operate in the same location.

Engstrom feels that the system will be cheap to use. The satellite, which is expected to last 7 years, could, for example, handle the distribution of programs for Sweden's two TV channels at a fraction of the cost required by today's system.

He also feels that the system will become profitable. It will pay for itself after being in service for 5 years if the fees are set at approximately the same level as those applying to a similar arrangement in the United States today.

Teleste May Build Video Stations

Teleste has submitted a tender for video receiving stations. Director Pekka Ketonen says that the number of such stations in the Tele-X system is between 10 and 100, but probably closer to 10 than to 100.

Ketonen argues: "The company has the know-how in this area, since it has delivered equipment to Helsinki TV and others. The requirements for the Tele-X may be a little stiffer, but Teleste will be happy to meet them. If we manage that, we will have both the know-how and the semimanufactures for similar installations in the future."

Director Ketonen says: "Without government subsidies, this project would never be carried out in our country. We are counting on about 5 million marks in development subsidies, and in the selling stage, we will perhaps be able to bill 2 or 3 million."

He notes: "The important thing for us is the chance to improve our range of products and, at the same time, get in on second-generation equipment with considerably greater marketing prospects. Obviously, equipment of this kind is not needed only for Tele-X."

For the future, there is the prospect of getting in on the NORDSAT project, which is on a considerably larger scale.

At the same time, Ketonen points out that Finland is getting a late start. Sweden has actually reserved a launch slot for the Tele-X satellite, and we have not even managed to decide on the extent to which we are willing to participate.

"We must make a decision quickly."

Ketonen also feels that the move by the Swedes to take complete charge of the Tele-X project when it became apparent that the NORDSAT discussions would be lengthy indicates realism and drive. Space technology is coming regardless of the decisions we make here in Scandinavia, so it is important for Scandinavian industry to acquire the relevant know-how in good time. Otherwise, those who got there first will have a discouraging advantage over us.

"The Swedes could buy practically all the components for the project abroad. Instead, they decided that most of them would be manufactured in Scandinavia. The main idea has been that the project should give firms sufficient know-how so that when they have completed their share of the work, they will have that know-how or even finished products that they can export for similar purposes."

Director Pekka Ketonen says: "That is why we are also interested."

Nokia: Satellite Control System

Nokia has offered a control system for the Tele-X satellite. What this involves is a computer to control the satellite's flight path. The project may be worth over 10 million marks—the exact amount will depend on how much the government invests in Tele-X.

Nokia is in a position to deliver more than that, and there have been sporadic contacts concerning other components as well. The control system can be regarded as a one-time effort, at least at this stage.

The feeling at Nokia is that the company should participate in the Tele-X project for technical reasons. Space technology is of decisive importance for making technical progress in the future.

Nokia also lets it be understood that the company would like to play a part in delivering equipment for ground stations, but that share of the work, which could lead to larger production runs, has been commandeered by Swedish industry.

Valmet Has Unique Antenna Know-How

Valmet's share involves a parabolic antenna that is 8 meters in diameter. If it is built, it will be located in Kiruna. The antenna can be aimed at the Tele-X satellite to follow the latter's movement very precisely.

Juhani Makinen, managing director of Valmet's Kuorevesi plant—which would build the antenna—says that the requirements concerning the antenna's surface are very exacting and that Kuorevesi in Finland is the only plant that can handle a job of that kind.

Even when the satellite is far away, the antenna will be able to send and receive electromagnetic impulses very effectively and with no expansion of the communications sector.

The Kuorevesi plant regards the project as being of great value. This kind of technology has been studied and greatly improved since the 1950's. Kuorevesi has been producing aircraft since the 1970's.

The Telecommunications Department at the Government Technical Research Center has been supporting the Kuorevesi plant, and the project that may fall to the lot of Valmet and the Government Technical Research Center is in the 10-million-mark class.

Makinen says; "For us and the research center, it is vital to be able to participate in a project of this kind.

"Satellite communications are the coming thing. And if Valmet is allowed to build a single antenna now, other projects may come up in the future."

He points to NORDSAT and emphasizes how important it is to have the necessary know-how if NORDSAT someday becomes a reality. But projects of various magnitudes that are concerned purely with exports may also come up.

MINISTER PROPOSES COOPERATION WITH SWEDEN ON SATELLITE

Helsinki HELSINGIN SANOMAT in Finnish 30 Jan 83 p 2

[Editorial: "Finland Cautious About Entry Into Space"]

[Text] Over the years the joint television satellite of the Nordic countries has been reduced to an artificial moon primarily serving the industrial policy goals of Sweden, which will offer services to Norway and Finland. Denmark has remained completely outside of this joint venture. There has even been some grumbling from Norway about the size of its share of the funding. Finland is also adopting a cautious attitude toward Sweden's Tele-X-project because of expenditures and plans to increase the amount of programming to be offered.

However, Cultural Minister Arvo Salo noted before the deliberations on the satellite began in Stockholm that joining the Tele-X-satellite would eliminate the need for the coastal channel to serve Finland's Swedish-speaking population. This view is completely justified since Swedish-language programming, in particular, could be increased by means of the satellite. The issue is whether the programming will correspond with those needs which were taken into consideration in the planning of the coastal channel.

The exchange of programs occuring by means of the satellite would be a practical solution from the point of view of Nordic cooperation and cultural policy goals. If it is able to satisfy the programming needs of Finland's Swedish-speaking areas, the ambiguity relating to this matter would be lessened. It is difficult to sink this joint venture by means of difficulties of a technical nature relating to copyrights.

However, the technological significance of the project is being promoted along with the cultural policy goals. Indeed, Sweden's government has decided to begin experiments on the satellite regardless of whether or not the other Nordic countries remain outside of the project.

Sweden's industrial policy goals are based on the achievement of high-technology knowledge and skills as well as the maintenance of international competition. Even though the project is very expensive, there is reason even in Finland to seriously consider the possible benefits that will be offered by it in connection with the development of communications technology. The construction of a coastal channel would not in this respect offer anything new since it would be based on a communications technology already well mastered in Finland.

10576

cso: 5500/2601

REPORT EXAMINES STATE ROLE IN DATA PROCESSING INDUSTRY

Paris LE MONDE in French 25 Jan 83 pp 17, 20

[Article by Eric Rohde: "Administration Interventionism Threatens the 'Electronics Industry Action Program'"]

[Text] On Monday 24 January, Philippe Lemoine, adviser to the DIELI (Directorate of Electronics and Data Processing Industries) director at the Ministry of Research and Industry, delivered to Pierre Mauroy a report entitled "Information Technologies, a Strategic Stake in Economic and Social Modernization" (to be published in February in Documentation Francaise). This report was requested by the Prime Minister last September in order to prepare a "political utilization" addition to the "electronic industry action program" ordered by the Council of Ministers of 28 July 1982 (LE MONDE, 30 July 1982).

Mr Lemoine's task was to take stock of the actions carried out by various organs for the promotion of new technologies, examine the role played in this respect by the Ministry of PTT, propose new public purchasing procedures and an interface between the industrial and utilization policies, and suggest new administrative structures. His report points out the uncoordinated intervention of some 30 administrative or para-administrative organs in the sector. The state can play the role of catalyst, but—and that is the report's main point—it is not up to it to determine which products should be manufactured. The selections must be determined through the needs expressed by users.

"Instead of being a stepping stone out of the crisis, technologic change risks... being for French society the occasion of an 'alienation' and of becoming more deeply mired in the crisis." This warning is motivated by a data processing picture in which delays and failures are evenly matched. With an inventory of numerical control tooling smaller than that of Italy (10,500 units against 20,000), a proportion of robots much lower than that of a country like Sweden (0.7 compared to 8 per 10,000 workers), a computer inventory whose relative value in Europe is losing ground (20.7 percent in 1978 and 19.5 percent in 1981, compared to 26.6 percent in FRG), France appears to be a country which finds it somewhat difficult to assimilate the new tools for information processing.

First of all, the established structures find it difficult to budge. In the administration for instance, only 10 percent of computerizable functions are actually computerized; more than 80 percent of the data processing expenses are made by just five ministries. In the education sector, which has about 77,000 establishments, there are only 5400 microcomputers; at the present rate of training, it is estimated that everyone will have a specialized education, over one hundred years from now!

Even the new generation of office automation equipment is not catching on France as it does elsewhere: in 1981, it represented only 13 percent of European deliveries (33 percent in FRG). Nor do the most sophisticated applications, such as the use of data banks, seem to be seducing the users: while France has about 10-15 percent of the world's automated information, querrying time does not exceed 1 percent of the total time devoted to this application. And at Velizy, the videotex guinea pig households, even though they have terminals at home, are not using them more than 1.3-1.5 times per week, still according to the report.

At Least Thirty Public Organs

However, these figures must not obscure the advanced achievements of computerization operations in certain enterprises or certain sectors like weapons and aeronautics. These are highlights which can only serve to hide the shortcomings.

The sectors that should act as leaders adopt defensive positions, observes Philippe Lemoine, and these can only generate vicious circles: "To maintain balances no markets are being developed; because there is no market, the national industry is forced to wait; because there is no national industry, the only recourse is to protect against foreign competition; and the invasion of foreign products, dooms more surely than any other strategy the fragile balances that one sought to protect."

On the fringes of the groups concerned with the dislocations caused by data processing technologies, no less than some thirty administrative or essentially public organs are nevertheless responsible for providing help, advice, and credits. The four major ones together have some 450 employees, "teams of experts," and 500 million francs, a sum expected to reach 1 billion in 1986. But "desintegrated, badly completed, outclassed, these organizations are... not adapted to the stakes current priorities."

From conventions and demonstration operations, to guideline plans or various projects, the Data Processing Task Force (MI), the Center for Studies of Information Processing Systems in Administration (CESIA), the Agency for Data Processing (ADI), or the Agency for the Development of Automated Production (ADEPA), each carry out diversified actions "without being able to define true priorities."

Each advocates a particular field according to a technologic pattern which is no longer pertinent, while tending to watch the neighboring domain without giving rise to truly complementary actions. Isolated, these organs no longer have "either the strength, the authority, or the legitimacy" to influence the large financial establishments and jointly formulate any sort of common policy which might create the "critical masses" which the manufacturers would need so badly.

According to Lemoine, this situation faces France with a triple risk: to eventually further hamper the competitiveness of the manufacturing industries, to create social conditions which refuse progress and obstruct the activities associated with it, and in cultural terms, to delay the occurrence of new analytic and design approaches. Now that the government has decided to give priority to the electronics sector industries, neither the conditions for a national expansion of production before attempting exportations, nor the conditions for production development controlled by users, are present.

What avenues can the government use to regain its footing? What principles would justify what actions? It is not the least of the report's merits to raise the issue of a fundamental problem which is most often avoided. Until now, Philipe Lemoine comments, the state's intervention consisted of either forbidding, regulating, doing, experimenting, or causing to be done. Of all these attitudes, the author prefers the last because it is the least authoritarian. But "cause whom to do what?" In other words, up to what point is it proper for the government to intervene in the applications of technology?

The limits of Lemoine's power are contained in the nature of his responsibilities. The major point of the report is that there cannot be any other utilizations than those determined by the users themselves. It therefore behooves the state to "liberate initiative" by not imposing its views on the nature of the products. It must act in such a way that this initiative may blossom while keeping in mind the national interests.

The problem of disseminating modern tools in society, and that of an inadequate support platform, can therefore be solved by a thorough reorganization of adminstrative structures and adoption of new methods of intervention reflecting a decisively offensive policy.

The keystone of this imagined edifice is a Commission for Information Technology. A "third party," similar to the Plan Commission of Jean Monnet, which would have "nothing to sell" except the national interest. Its charter would however give it operational power, similar to DATAR's (Delegation for Land Improvement and Regional Action). Its task would be to encourage initiative and demand, as well as to create a strategic viewpoint that could serve as reference, all of it consistent with the industrial policy of the electronics sector.

Detailed studies of its functions are being carried out. The commission would be under the jurisdiction of the Interministerial Committee of the sector, chaired by the Prime Minister, or through delegation, by the minister of research and industry.

The commission's activities would be supported by four public establishments of an industrial and commercial nature (EPIC), composed from the reshaped existing major organs; this would mean an Agency for Administration Information Systems (ASIA), an Agency for Production and Data Processing in Small and Medium-Sized Industries (API-PMI), an Agency for Large Enterprises and Business Services (AGREST), and an Agency for Education and Communication Technologies (ATEC).

A "strategic committee" composed of the ministers involved, representatives of union leaders, and user organizations, would help assist in its decisions. "A high council of information technologies in the administration," combining in equal parts the base and the apex, would be its counterpart in the public sector. It would have to know and discuss an equipment policy devoid of antiquated regulatory and budgetary procedures. Lastly, an autonomous structure, but one connected to the commission, is proposed specifically for the medical-social sector.

The report additionally suggests a clear refocusing of PTT's public service, on infrastructure activities, whose utilization should henceforth give greater consideration to the needs that users (cable users, notably) would channel through the commission.

The Lemoine report thus urges a total restructuring which is already causing unhappiness, so as to allow rapid "feedback" between the real nation and the government, without which the author believes France will miss the train of progress.

One could certainly observe that there is something paradoxical in wanting to encourage initiative from below while creating a point of coherence above. But what would it be like if neither existed?

11,023

EFFECT ON NORWAY OF TELECOMMUNICATIONS REVOLUTION AIRED

Oslo AFTENPOSTEN in Norwegian 12 Feb 83 p 5

[Article by Knut Lovstuhagen: "A Quiet Tele-Revolution"]

[Text] A quiet revolution is taking place in the telecommunication industry, and we will all be affected. The coming upheaval will be compared by many to the consequences of the industrial revolution, although in another way. The origin of the technical revolution is the marriage between telecommunication technology and computer technology—a combination which is rapidly bringing us into the information age.

With advanced electronics and fiber optics as the most important tools, technology is intensely busy creating systems which can bring data, sound and pictures into our homes and offices on one and the same cable. Tomorrow's telecommunication net will be able to transmit all forms of information. It will be so-called digital.

The Telecommunication Administration is now preparing to lay the foundation for the fully digital telecommunication net of the future in Norway. At the end of December last year 5 firms bit for digital public telephone centrals with a total of 500,000 subscriber numbers. Which of the five-Elektrisk Bureau, Standard Telefon og Kabelfabrikk, CIT-Alcatel (France), Nippon Electric Co.(Japan), or Northern Telecom (Canada)—will get the contract for 600-700 million kroner will be known during the year. The telecommunication Administration will make a recommendation to the Ministry of Transport and Communications before 1 August. The ministry will then report to the Storting, which is expected to give the Telecommunication Administration authority to order during the fall session.

There are many indications that the choice is going to be between the Elektrisk Bureau and Standard Telefon og Kabelfabrik. Both firms are exerting heavy pressure on politicians to reach a "Norwegian" solution, reminding of the negative effects for employment if a foreign system is chosen. Late this week the Storting Communications Committee visited the Elektrisk Bureau

factory at Hisoy outside of Arendal. It was then made very clear that the factory, which is one of the largest workplaces in Aust-Agder, will be closed if the firm does not get the contract for supplying the new centrals to the Telecommunication Administration.

The chairman of the committee, Kjell Borgen (Labor Party), said after the visit that heavy value will be placed on the importance of the contract for employment, especially because of today's situation with increasing unemployment. On the other hand there is danger that the Norwegian telecommunication industry will be damaged in markets abroad if there is the impression that political considerations governed the awarding of the contract to a Norwegian firm. Abroad that will be seen as protectionism, and they will probably retaliate with the same treatment toward Norwegian firms. As has been pointed out, "Industrial policies should have been considered before asking for international bids on the new centrals."

The Telecommunication Administration has formed an expert group which is going through all the bids from the five firms which are competing for the contract. At one stage the bids from two of the firms—both foreign—were set aside as being of less interest than the others. However, they have again come under consideration. Furthermore AFTENPOSTEN has learned that Norwegian firms are having certain problems with being competitive in price. The choice of the system will, however, be made after a combined evaluation of price, quality, the amount of Norwegian production available and export possibilities.

Independent industrial sources told AFTENPOSTEN that Standard Telefon og Kabelfabrik offers the absolutely most advanced digital telephone central for the public net. The product is entirely new and developed from the ground up as an entirely digital system by ITT. On the other hand the advanced technology of the STK/ITT system works against that choice. Seen from the viewpoint of the Telecommunication Administration as the consumer there can be the attitude that the central is so new that they still do not have enough operational experience at the time the choice is to be made. The danger in investing in such an advanced system is that it must be possible to prevent failures and shortcomings, it was said.

According to the plans of the Telecommunication Administration the first two digital centrals should be delivered in 1985 and placed in operation in Oslo and Trondheim during the first half of 1986. Thereafter the installations will follow step by step, but it will still be many years before digital telephone centrals are in place in the entire telecommunication network. As it appears today, by the year 2000 there will be as many digital as analog centrals in the network.

At the same time as digital telephone centrals begin to appear on the Norwegian telecommunication network, fiber optic cables—also called light cables—will gradually be introduced. These are hair-thin fiberglass wires

which can carry signals by laser beams with either data, sound or pictures. It is possible that the expansion of the fiber optic net can begin by the end of the 1980's Then we will step into "the wired society."

Today we have our own telephone net, our own data net--the Norwegian one-a teletype net and our own net for transmission of radio and TV. In the wired society we will have a so-called service integrated telecommunication net which will provide all these services. The question of a cable TV net will not exist. Business will be able to satisfy its requirement for high speed data transmission. A number of new services will be introduced for business, while existing services probably will become relatively more reasonable. General telephone users who today are tied to computer-controlled telephone centrals have already a number of the new telephone services which the digital technology will bring, but they will be more generally available and less espensive. The public will be able to have data terminals at home, which will include possibilities to carry out jobs and school work at home. We are not only talking about the wired society, but also about the wired home and the paperless office. Seen from today's viewpoint it is a long time until this will be a reality for most people. Experience has taught us, however, that no one knows how quickly the future will be here, with the rapid advances now being made.

9287

TELECOMMUNICATIONS INTRODUCING TELETEX SERVICE IN 1983

Oslo AFTENPOSTEN in Norwegian 20 Jan 83 p 56

[Article by Erik Bjornskau]

[Text] In 1983, as a new name in the ever-growing list of new services, the Telecommunications Service is introducing the so-called teletex service, an international designation for text transmission in the telecommunications network linking text-processing terminals.

As was the case with telefax, the Telecommunications Service wants to offer not only a transmission network for the "supertelex" service, but also a marketing service for the terminal equipment, in competition with private manufacturers. Of course, all teletex terminals will be connected to the national and international services, regardless of the manufacturer.

Office manager Johanne Soknes of the Telecommunications Directorate said that the Telecommunications Service had received about 15 bids on the equipment and that a decision would be made in the near future. The service is expected to be available beginning in November of this year.

Teletex is only the beginning of a minor revolution in office automation. The main advantage of the service is that it offers a consolidation of terminal equipment that is capable of preparing, editing, and correcting documents and letters and provides a supermodern telecommunications network for the rapid transmission of these documents to other teletex customers. It will take only 10 seconds to transmit a standard-size letter from sender to receiver. The terminals have all the standard international symbols found on an ordinary type-writer. Thus, letters and documents can be prepared and either stored or sent. Instead of envelopes and out-baskets, the desired document is transmitted to the receiver's electronic storage automatically. These advanced terminals will have other possibilities, in addition to pure text processing. These functions use built-in software, such as billing programs, inventories, accounting, ordering routines, etc. Thus, the customer receives a computer that takes care of text processing, electronic filing, and administrative tasks.

As part of its sales campaign, the Telecommunications Service will offer free customer training, with follow-up training on the job, according to Johanne Soknes. The equipment will cost approximately the same as text-processing

machines in general, but it will cost no more than 10 ore to send a letter in 10 seconds, she said.

The Norwegian teletex service will not depend on the varying capacity of today's telephone network. The service will utilize the supermodern digital "public data network" which began operating in 1981 for the so-called Datex service—direct transmission between computers. This communications network eventually will carry several telecommunications services and it has a great capacity. "We got an early start here in Norway and are in a fortunate position with this network at our disposal. Other countries will be forced to use already over—burdened telephone networks. In fact, only West Germany and Sweden have approached teletex seriously. We also will offer more advanced terminal equipment than that available in other countries," Soknes said.

A market survey undertaken by the Telecommunications Service indicated that there is great interest in the service, according to public relations director Christian Bugge Hjorth. It also indicated that companies expect something more than just an improved text-processing system. There is considerable interest in greater participation in data processing and the exchange of information. This also means that the Telecommunications Service may have to become more involved in software production, systems that can be used, and various program packages that may be needed for the exchange of information amoung various sections of a decentralized data system. "We probably will become more involved in the consolidation of data technology and telecommunications," Bugge Hjorth said.

SIEMENS EXPECTED TO GET CONTRACT FOR TELETEX SERVICE

Oslo AFTENPOSTEN in Norwegian 20 Jan 83 p 56

[Article by Mariann Nordstrom]

[Text] In all probability, the contract as sole supplier to the Telecommunications Service of terminals for the teletex service will go to Siemens A/S with Tandberg Data A/S as a subcontracter. The Telecommunications Service received 15 bids and, according to AFTENPOSTEN's information, a report will be presented to the board of the Telecommunications Service recommending Siemens-Tandberg. The board will discuss the matter on 28 January.

The initial round of orders will include contracts worth about 20 million kroner, AFTENPOSTEN learned. Three companies made it to the "finals," the other two being Ericsson Information Systems and Philips. The chairman of the board at the Telecommunications Service, Egil Abrahamsen, would not confirm the figures, but said that this contract was not large compared to the Telecommunications Service's investment budget of 3.2 billion kroner for 1983, but he said that the contract would be important to the company that received it.

Christian Bugge Hjorth, public relations director at the Telecommunications Service, would neither confirm nor deny that Siemens-Tandberg had a leg up on the other companies in the competition for the contract. He did confirm, however, that a recommendation is being made to the board and that the matter would come up in a week or so. Bugge Hjorth said that the contract with the Telecommunications Service was attractive because the Telecommunications Service wants to market the product that is chosen. The Telecommunications Service also wants to assume responsibility for service, maintenance, and warranties.

Administrative director Tor Jemtland of Siemens A/S said he had not heard that Siemens-Tandberg had been recommended for the contract with the Telecommunications Service. "That is nice to hear," he said. Hans Lodrup, head of marketing at Tandberg Data agreed. "This would be extremely important for us--both for the domestic market and for our exports. By cooperating with the Telecommunications Service, we would be included in the teletex service in its initial phase, which would be extremely advantageous. In terms of exports, we could use the Norwegian Telecommunications Service as a reference. The telecommunications services in Scandinavia have a good reputation abroad and such a

reference would be extremely important," Lodrup said.

Director Jemtland of Siemens said it was Siemens that delivered the bid to the Telecommunications Service, with Tandberg Data as the subcontracter. "Our bid is based on hardware from Tandberg and software from Siemens," he said. This product, which now seems to have competed successfully on the Norwegian teletex market, was developed in Norway through cooperation between the two companies.

Jemtland said that a contract with the Telecommunications Service would mean great possibilities for its teletex station.

9336

NORWEGIAN PRIME MINISTER RESISTS SWEDISH PRESSURE ON TELE-X

Oslo AFTENPOSTEN in Norwegian 22 Feb 83 p 3

[Article by Eivind G. Karlsen and Einar Solvoll: "Tele-X Tug of War"

[Text] The Swedes are preparing for a war of nerves with Norway over their Tele-X project, with the intention of having the Norwegian financial contribution increased. But Prime Minister Kare Willoch gave a clear signal yesterday that their wishes will hardly be fulfilled.

In a debate in the Nordic Council Prime Minister Willoch said, "From the Norwegian side we must state that we can not enter into the project with such a large share as expected on the Swedish side, since the industrial and technological advantages for Norway do not seem to justify such a large outlay."

Sweden considers that Norway should participate with 26 percent, while Norway offers 10 percent as more suitable to the advantages which Norway will gain from the satellite. But these questions will be discussed further between the Swedish and Norwegian ministers of industry at the Nordic Council this week.

The vice chairman of the Nordic Council Cultural Committee, Ingrid Sundberg (Conservative) said yesterday that since Norway will not cooperate on the Tele-X satellite, Sweden will not participate in the further investigation of a Nordic TV satellite. And former Swedish foreign ministers Ola Ullsten and Thorbjorn Falldin followed up by stating that if this project also fails it will mean a new serious blow for industrial cooperation in the Nordic countries. The project does not have any decisive economic or industrial importance, claimed Falldin, while Ola Ullsten said that a failed Tele-X would outweigh any advantages that a country could derive from nonparticipation.

Finnish Foreign Minister Par Stenback, who also previously was involved in the Nordsat project, pointed out that the government shift in Sweden has led to uncertainty about Sweden's attitude toward the project, and he hoped that the Oslo session could clarify the issue. But the debate is now dominated by the Tele-X project, which he said would be more realistic if everyone wanted to "go hand in hand into the satellite age."

The debate on Tele-X continues in the Nordic Council today.

9287

FIRM IN COMPETITION FOR DISTRESS BUOY WITH SATELLITE LINK

Oslo AFTENPOSTEN in Norwegian 19 Jan 83 p 4

[Article by Rolf L. Larsen]

[Text] Space now will be utilized better to save lives. A new automatic distress system for ships now being developed will be tested in conjunction with a maritime satellite 36,000 km over the Atlantic. Researchers and representatives of agencies and industrial firms in the Soviet Union, the United States, Great Britain, West Germany, and Norway will sail into the North Sea next week on the West German research ship Gauss to test the distress system. If these tests are successful, this equipment may become the distress system of the future for ocean-going vessels.

"The five nations have developed different systems for distress buoys which will be tested with the satellite. We will be in the North Sea for 3 weeks and it appears that we will have the weather we want: storms and high winds. In this weather we will have a unique opportunity to test the equipment under severe and realistic conditions," engineer Eirik Bliksrud of the Telecommunications Directorate told AFTENPOSTEN.

The new distress system is a refinement of the already existing distress system. In the present system, transmitters float and begin transmitting automatically if they are thrown overboard from a ship or float up when a ship goes down. They transmit at civilian and military frequencies. These signals are received only when a plane in the area receives the signals from the equipment. These floating emergency transmitters are on all Norwegian ships today.

"These new distress buoys we now are testing will begin transmitting automatically to a satellite when they are thrown overboard in the North Sea. Satellites in the so-called INMARSAT system will be used in the future. This system is used at present for ships that have satellite communications equipment on board. When the buoys begin transmitting, their signals will be received from the satellite at ground stations within several minutes. The report then will be transmitted by telex to the nearest rescue station," Bliksrud said.

The research project in the North Sea will test the distress buoys in conjunction with a satellite in so-called "geostationary orbit" 36,000 km over the Atlantic Ocean. This satellite follows the earth's rotation and "stands still"

over the equator. The distress signals will be received from this satellite at a research station near Madrid. An entire staff of researchers there will analyze the signals from the buoys in the North Sea and see how the various buoys perform. The plan is to "feed" information into them: the buoys will be able to send information on the ship's position, a signal identifying the ship, the ship's velocity, course, and the type of situation that created the emergency on board. Within a few minutes the entire message will be sent from the buoy via satellite to the ground station. In the future these messages will be sent by telex to rescue stations.

"So far we have made a number of tests with the buoys. They have undergone rigorous testing in laboratories, in simulators, and on land. Now they will be tested for the first time in their proper element by a joint team from both Eastern and Western nations. I find it especially gratifying that these nations now are cooperating to develop such a system. We will see who comes out best. The buoy developed in Norway has demonstrated its good qualities. It is on a par with the others and we are looking forward with great anticipation to the North Sea tests," Eirik Bliksrud said.

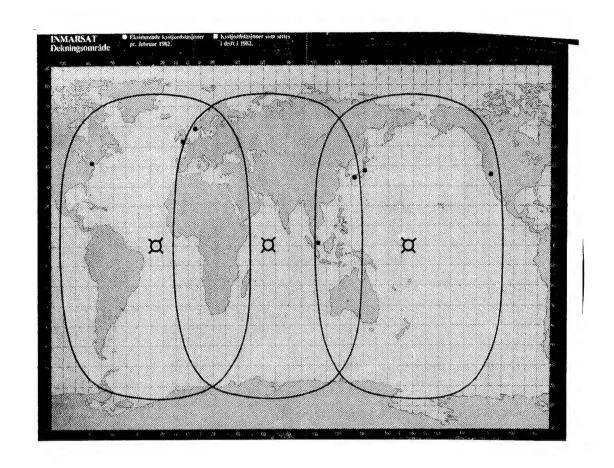
Selbu Company In Satellite Project

The Norwegian Council for Scientific and Industrial Research (NTNF), the Telecommunications Directorate, and the Delcom Elektro A/S electronics company in Selbu, Sor-Trondelag, are developing the Norwegian distress buoy that will compete with buoys from the Soviet Union, the United States, West Germany, and Great Britain for 3 weeks in the North Sea. "Obviously we are anxious to see the results. They could have great significance for our company in the long run," project leader Jon Schiefloe of Delcom Elektro A/S in Selbu told AFTENPOSTEN.

Delcom Elektro A/S already has made a breakthrough in the development of distress systems. The small Selbu company now is developing free-floating distress transmitters for ships and fishing vessels. "We have produced over 1,800 transmitters of this type which now are on board ships all over the world. Our company has 20 employees," Schiefloe said.

He was asked what impact successful testing of the new equipment in the North Sea would have on his company.

"It would not mean much in the short term, but the fact that a small company such as ours is testing a product with large companies in the United States, the Soviet Union, West Germany, and Great Britain would be of great significance in the long run. This project will bring recognition to our product and our company throughout the world and we will become familiar with the technology of the future in this area. We also will participate in the development of this technology. Obviously we are anxious to see the results," Jon Schiefloe said.



These three satellites, 36,000 km out in space, will make it possible in the future to receive distress signals from almost anywhere on earth.

9336

STATE TELEVISION MONOPOLY ENDED BY ADS, CABLE, LOCAL STATIONS

Copenhagen INFORMATION in Danish 4 Jan 83 p 2

[Article by Ole Kromann, INFORMATION correspondent: "Norway has broken the TV monopoly long before Denmark. Cable TV and satellite are sending commercial TV to Norwegian receivers."]

[Text] Oslo in January. Is the Norwegian monopoly with the difficult name Norwegian State Broadcasting (NRK) about to be washed away or buried by waves in the ether from a growing number of private radio and TV stations?

There are reasons for asking about this since the Conservative government after it took office in September 1981 opened the floodgates up to private sector broadcasting by approving 37 applications for operating private radio, three applications for cable TV transmissions and seven applications for retransmission of satellite programs through cables.

This development comes after a couple of years debate about NRK's role as a monopoly institution. It was the former (Social Democrat) radio head Torolf Elster who opened the debate in earnest with the following strong volley against the monopoly he was managing:

"The Norwegian broadcasting monopoly is contrary to basic democratic principles. It is primitive and inelastic and a great weakness in such an important opinion-creating factor as NRK," he wrote in February 1980.

When Lars Roar Langslet took over the job as minister of culture he wanted to get the NRK monopoly phased out as soon as possible, and as early as December one year ago a number of individual persons and organizations received permission to operate private radio and TV activity—some of them also with advertising from Norwegian companies via English-produced TV programs and satellite and cables.

Newspapers Participating

Whereas in Denmark there was to be a meeting on 10 January 1983 between the organization "Council of Copenhagen Daily Newspapers" and the minister of culture about permission for TV transmissions run by the newspapers, this new form of media propagation was started in Norway 3 to 4 months ago.

The following newspapers in the capital participated in the project: AFTENPOSTEN (Conservative), ARBEIDERBLADET (Social Democrat), DAGBLADET (Liberal Independent), VERDENS GANG (associated with the company which

publishes AFTENPOSTEN, now Norway's biggest newspaper), VART LAND (Christian), NATIONEN (looks out for the interests of agriculture), KLASSEKAMPEN (main organ for the Workers Communist Party), and the big local newspaper AKERS AVIS.

The private company, Janco-vision, made its cable television network with connections to 70,000 households available to the newspapers, which were to pay for the programs. The newspapers are collaborating in groups of two on 20 minutes of weekly transmission, and the company does not get involved in the editorial planning, even though it has the editorial responsibility.

Actual news material is not involved as in the Copenhagen project with the newspapers AKTUELT, BERLINGSKE TIDENDE, B.T., BORSEN, EKSTRA BLADET, INFORMATION, KRISTELIGT DAGBLAD, LAND OG FOLK and POLITIKEN. Janco-vision wants the cassette with the program 24 hours before it is to be transmitted. The Swedish TV channel 1 is used before and after its transmission time. Sports competitions are now also being sent regularly during late night hours.

Always Most Important

The administration in NRK also takes a favorable attitude to the competition from the nearby radio and local TV stations. It is expected that NRK will continue to be the most important institution even if the monopoly is broken. When radio was in its infancy in Norway, there were a series of private local radio stations all over the country, but large areas were not covered for technical and economic reasons. NRK was therefore established with the sole right to make the radio transmission cover the country. Even though the Conservative Party and Norway's Listeners Association at one time were against the monopoly, it was supported by the great majority because of the quality of the programs.

Originally the Conservative Party's present minister of culture was against expanded rights for private individuals for operating radio stations, and as late as 1971 he went against a proposal about it. Later on he has been playing a different tune. He has talked about NRK's "turning left, one-sidedness and absolute power, about the monopoly, which is contrary to the spirit in western democracies."

Now the idea of private local radio stations and privately financed satellite and cable TV is supported by circles far into the left side in Norwegian politics. The monopoly is called undemocratic, regimented and contrary to the Constitution's paragraph 100 about freedom of speech. The media on the air should be just as free as the newspapers. For the opponents it is just as unreasonable to have a radio and TV monopoly as to publish a "state newspaper."

Chaos Over the Air

The defenders of the monopoly claim that there will be chaos on the air if one loses control. Freedom in the ether can not be compared with freedom of the press. As late as in February Oslo City Court established in a judgement that NRK's monopoly does not violate the constitution. On the contrary, it looked after the needs of weak groups for being heard in a way which broadcast media financed by advertising will not be able to do.

In the debate about the local radio the experience from, for instance, France has been used to scare people. In the Paris region alone there are more than 120 radio stations, and in this chaos of local radio channels it is the strongest ones who assume the leadership:

Religious groups, large newspaper companies and powerful commercial interests and chains of companies. In addition, people lose interest in listening. Experience also shows, the critics maintain, that the staff in the monopoly institutions do not produce more quality and better products if they get competition from private individuals. Instead of serious quality programs the tendency is to use the same light entertainment and pure pop as private stations.

They have also pointed to the danger of monopolizing the local power concentrations where big newspapers also take over the local cable network.

Loss in Advertising

The Norwegian Weekly Press Information Office calculated in August that if advertising gets into Norwegian TV, athletics will lose between 150 and 200 million kroner annually, while the annual losses for the weekly press will be up to 100 million kroner in the first 5 years. After that time the losses will stabilize at a lower level when the novelty interest in advertising TV has died down. Today the weekly press gets one-third of its income from advertising.

Even though the OTS satellite already today sends advertising to tens of thousands of Norwegian TV screens, they are still a local phenomenon. They will not threaten the weekly press as long as the advertising is sent via satellite and cables in local areas.

A couple of hundred thousand Norwegians let themselves be fed each evening with advertising and English language entertainment from the OTS satellite, which also reaches TV sets in Helsinki, Zurich and on Malta, and now it will also be expanded to Belgium and the Netherlands. The emphasis in the advertising comes from multinational companies, and one can buy time from 10 seconds and up to 1 minute a certain number of times weekly during a 3-month period.

At the moment Oslo's municipal authorities are trying to decide whether or not they should get involved in a test activity with local radio and TV transmissions, primarily intended for social information service, as a serious entry in a varied media picture, where the viewers and listeners frequently may feel somewhat helpless in the jungle of channels and transmission times.

And all of this is really just the beginning.

CSO: 5500/2584A

8958

PORTUGAL

MARCONI PURCHASES EUTELSAT LINK

Lisbon EXPRESSO in Portuguese 29 Jan 83 p 10-S

[Text] The Portuguese Radio Marconi Co signed a purchase contract a few days ago for a communications earth station which is to begin operating in Sintra from mid-1984 onward.

The station's purpose is to establish a link with the 12,000-circuit-capacity European communications satellite, EUTELSAT, which will be launched by the European Space Agency.

The total cost of Antenna Sintra 4, as it will be called, is approximately 600,000 contos. Out of this total, approximately 500,000 contos is for the contract with the Japanese supplier while the remainder goes to pay for infrastructure costs.

The station should start off with approximately 300 circuits, which will considerably increase the available international means of communications and reduce the overloads and saturation of the telephone circuits.

It should be pointed out in this regard that the above-mentioned satellite is the first to have digital technology. This launch will follow many others with experimental satellites which the European Space Agency has carried out. The Sintra station will be one of the first to be connected to the satellite. The entire system is to be operational in 1984.

In the opinion of the technicians with whom we spoke, the purchase of the new station was becoming indispensable because our capabilities for communicating with the outside were becoming relatively less in relation to the constantly increasing telephone calls.

It should be recalled that in Europe Marconi has only submarine cable links with England, France and Morocco in addition to three hertzian bands (more expensive) for links via Spain.

9935

BRIEFS

AUTOMATIC TELEPHONES IN SOUTH--Total automation of the telephone network of the south of Portugal was achieved yesterday when, symbolically, at the Cachopo (Algarve) station manual connection was used for the last time. The CTT [Central Administration of Post Offices, Telegraphs and Telephones] reported that with the automation of the small Cachopo, Alcoutin Council, network, still to be automated--except for some cases in urban areas of Lisbon and Porto--are some Mancorvo networks with somewhat over 500 subscribers and 4 networks in the Azores with less than 200 stations. The Cachopo network will benefit the Azores and Madeira with automatic access to 17 countries of Europe, the United States of America, Brazil and Mozambique, as all other Algarve networks have already done. At the present time 41 of 49 telephone networks of the CCT comprising close to 90 percent of subscribers (except in Lisbon and Porto) have automatic access to Europe. However, only those of Algarve automatically link it to Azores and Madeira. It is in Algarve where the highest average yearly rate of growth of the telephones (11 percent) is registered. There are 9.7 telephones for every 100 inhabitants, while in the rest of the country (excepting Lisbon and Porto) the density does not exceed 6.4 telephones per 100 inhabitants. [Text] [Lisbon DIARIO DE NOTICIAS in Portuguese 5 Feb 83 83 p 5] 11635

cso: 5500/2616

ERICSSON ESTABLISHING BRANCH FOR DEFENSE, SPACE COMMUNICATIONS

Stockholm SVENSKA DAGBLADET in Swedish 8 Feb 83 p 9

[Article by Weje Sanden]

[Text] The Ericsson group will form a large new company in the field of electronics--Ericsson Radio System AB. The company will have 6,200 employees and it is expected to gross 3 billion kronor this year.

A number of units within the group will be combined to form a separate company. The main component will be the mobile telephone company SRA Communications, which will contribute 4,000 employees.

Ericsson Radio System also will include the group's defense and space electronics division and the military telecommunications section, which together have 2,200 employees.

"We are forming this company for two reasons. By collecting these units under one roof, we can improve coordination and marketing," director Olle Ulvenholm of Ericsson Radio System said.

Name Change

"The second reason is the name change from SRA to Ericsson. In 2 years our exports have increased from 30 to 50 percent of our production and by changing the name to Ericsson we hope to increase our share of foreign markets."

Ericsson Radio System will be one of the country's largest electronics companies. Some of its products will be mobile telephone systems, land mobile radio systems, paging systems, air traffic control equipment, satellite communications, radar, and electrooptics.

Sales will be divided equally among civilian and military customers.

The units involved had new orders of about 4.5 billion kronor last year. They included orders for mobile telephones from the Netherlands, Spain, and the Middle East.

The new company will be under the leadership of SRA's present executive vice-president Ake Lundqvist and second executive vice-president Ulf Johansson, former head of Ericsson's military and space electronics division in Molndal.

Most of Ericsson Radio System's activities will be located in Kista near Stockholm. Production also will occur in Gavle, Kumla, Boras, the Netherlands, and Finland.

The need for personnel is expected to increase and Ericsson Radio System will have to recruit qualified technical personnel from the very beginning.

9336

ERICSSON FIRM ENJOYING SUCCESS WITH PHONE EXCHANGES, DATA

Stockholm DAGENS NYHETER in Swedish 13 Feb 83 p 6

[Article by Sven-Ivan Sundqvist]

[Text] LM Ericsson has passed Volvo as the highest valued company on the Stockholm Stock Exchange. LM Ericsson was worth 12 billion kronor according to Friday's closing stock prices. S-E Banken has increased its number of A-shares and now controls more votes than Handelsbanken.

Ericsson's shares have increased in value by more than 200 percent in 2 years. The success of the company's telephone exchanges is the main reason for the reevaluation of Ericsson shares. The challenge of the eighties is the major investment in information handling. A current challenge for the company is LM Ericsson's exposure in Argentina, Brazil, and Mexico.

LM Ericsson is streamlining its organization this year. As Asea did previously under executive vice-president Percy Barnevik's leadership, LM Ericsson is leaving its product-oriented organization and going over to eight spheres of activity under leaders who will have joint responsibility for development, production, and marketing.

The reorganization seems to have taken a long time. Investments in the AXE exchange system and the formation of Ericsson Information Systems apparently has taken longest. But now the time has come. It even seems that executive vice-president Bjorn Svedberg is considering making public the 1983 figures for each of LM Ericsson's eight sections. At least, Svedberg said, future annual reports will be much more shareholder-oriented than before. The previous absence of published results has kept LM Ericsson out of the running for the "best annual report."

Estimate

In order to present some idea of the magnitude of Ericsson's eight areas of interest, DAGENS NYHETER has estimated their turnover in 1983 (in billions of kronor).

		1983
1. 2. 3. 4. 5. 6. 7.	Telephone and telex exchanges Ericsson Information System (EIS) Cable, etc. Defense products Mobile radios, etc. Power network products Components (RIFA, etc.) Other	8.5 5.5 4.0 1.0 2.0 1.3 0.7 0.5
Total		23.5

The firm's 1982 volume was almost 20 billion kronor. Comparative figures for 1982 for the various sections will be published on 11 March.

The first two sections in the table are the important building blocks in LM Ericsson. The first is well established and profitable. The second is new and will yield no profits this year. The success of the one is the basis for investment in the other. If the modern electronic telephone exchanges ("AXE exchanges") had not enjoyed such unique success, LM Ericsson hardly would have taken the giant step into information handling.

Good Reputation

There are a half dozen worthy competitors in the area of telephone exchanges. In this area LM Ericsson has an excellent reputation. This area of business is clearly defined.

In information processing there are hundreds of competitors—large and small. This sphere of business is broad and relatively undefined. As with telephone exchanges, the market for information handling is international.

But the foundation will be laid in Europe and there EIS must compete with giants such as IBM and Rank Xerox and many smaller specialized companies.

Telephone exchanges are sold throughout the world to a limited number of telephone companies. EIS will sell to tens of thousands of customers. An important challenge now will be to acquire knowledge of broad marketing techniques. Such knowledge has been bought via Data-Saab in 1981 and Facit in 1982.

The various competitors in the field of office automation approach the problem from different directions. IBM has large computers, Esselte has office equipment, and Xerox has copying equipment.

EIS approaches the problem with private branch exchanges. This does not sound very exciting, but the more you listen to EIS chief Hakan Ledin the more

convinced you become.

Heart Of The Office

LM Ericsson always has built private branch exchanges, i.e. the office's central facility for receiving and distributing telephone calls to and from employees.

EIS sees the private branch exchange as the heart of the office of the future. During the eighties and nineties it will distribute not only speech, but also text, data, and graphics. As an office exchange, LM Ericsson has developed a "relative" to the AXE public telephone exchange. This relative is called MD-110.

EIS' vision of the future, i.e. office information handling during the 1990's, includes the systems-thinking behind the development of a country's telecommunications network. The upcoming years of the eighties, however, will see more drudgery than grandiose systems applications. EIS must establish its various products internationally before it can begin marketing systems.

The MD-110 private branch exchange, the Alfaskop 41 video display, the modern Eritex telex machine, a personal computer that is coming out, Facit's type-writers and printers, and other equipment will be sold.

AXE and EIS will be the highest volume items for LM Ericsson during the next few years. In 1983 they will account for just over half the firm's sales.

60 Million Automobile Telephones

The other six areas of business include a rapidly expanding area (mobile radio), a high-technology but low-volume area (RIFA), and a high-volume area that currently is depressed in the United States (cable).

Executive vice-president Ake Lundqvist of the mobile telephone section predicts that there will be 20 million automobile telephones in Europe in the year 2000 and 40 million in the United States. Today the automobile telephone itself costs about 20,000 kronor. When it becomes a high-volume product it may cost about 10,000 kronor. Thus, the world market for automobile telephones during the remainder of this century should total about 60 billion kronor at today's prices. There are about 8,000 automobile telephones in Sweden today.

There is keen competition when it comes to the automobile telephone itself, but there also must be a communications network in order for calls to be made and received. There is less competition in this area and LM Ericsson is well established.

In the United States "service companies" are making numerous applications for concessions to establish service in well-defined geographic regions to manage the communications network. In their applications for concessions, the service companies that wish to administrate the network must indicate the

manufacturer of the network equipment they intend to use. Of about 30 applications for concessions from so-called "independent service companies" made so far in the United States, one third have indicated that they would use LM Ericsson's equipment. The rest would use Motorola equipment.

Like the mobile radio section, RIFA is located along the E-4 highway north of Stockholm in Kista (Sweden's Silicon Valley). RIFA sells microcircuits for about 0.5 billion kronor.

Ericsson's cable business consists of telephone and power cables. Traditionally, the telephone cables have been made in the form of thick bundles with paired copper wires coated with plastic. These wires are not so imaginative.

Now, however, so-called fiber optics is on the way. A pair of copper wires can carry only a single call. A pair of glass-fiber wires can carry almost 2,000 calls. The next generation of paired wires of glass fiber will be able to carry 8,000 calls.

When cable TV makes its breakthrough, the use of fiber optics should increase dramatically. The markets will be endless if the welfare and growth of the Western World continue. The problem of the future, however, could be the same as it has been for copper cables for many years, namely that there is a considerable overcapacity for the production of glass fibers. On the other hand, LM Ericsson's strength should lie in terminal and connecting equipment for fiber cables. On the production end, the company is dependent on the patents of others.

Decisive Step

In 1980 LM Ericsson and the American oil company Atlantic Richfield formed a joint company, Anaconda-Ericsson. The company's goal is to "manufacture and sell cable, wire, and telecommunications equipment." The idea was that the cable business in the United States would provide a surplus for financing a breakthrough for telephone exchanges, mobile telephones, and private branch exchanges in the United States.

Anaconda-Ericsson was a decisive step for LM Ericsson on the American market, but not just for the company's cable, but also for telephone exchanges and private branch exchanges. This also could open the door for EIS. At present Anaconda-Ericsson is facing certain problems. The cable market is slow and the marketing of private branch exchanges is costly.

Presumably, the cable problems in the United States are temporary. A more long-range problem, or rather a challenge, as executive vice-president Bjorn Svedberg prefers to call it, is the Ericsson group's exposure in Latin America. Svedberg has not yet commented on Ericsson's activities in Brazil, Argentina, and Mexico, but big money is involved. Svedberg visited South America six times in 1982.

LM Ericsson's present stock-exchange value is 11.9 billion kronor. This makes LM Ericsson the highest valued firm on the Stockholm Stock Exchange. Volvo is valued at 9.6 billion kronor.

Higher Profits

LM Ericsson's 1982 profits after estimated taxes should be around 600 to 700 million kronor. Thus, the company's p/e ratio now is about 18. In 1982 Volvo had profits of about 1.2 billion after estimated taxes, which yields a p/e ratio of about 8.

Clearly, the stock market believes in higher future profits for LM Ericsson than for Volvo. The following factors indicate that the market is right about LM Ericsson's potential for profits.

1) The graph below shows how the transition from labor-intensive electromechanics to less labor-demanding electronics has resulted in fewer workers at LM Ericsson plants in Sweden. Ericsson employed about 15,000 workers in 1975/1976 and about 9,000 at the end of last year. This trend will continue in 1983 and 1984 and probably in 1985 and 1986.

The same process, on about the same order of magnitude, now will begin in Ericsson's plants abroad. Total personnel savings in the company could amount to several hundred million kronor annually. To be sure, the number of engineers and white-collar workers is increasing, but the net result still should mean considerable savings.

- 2) AXE is a success and is growing on its own steam. The chart below shows the enormous increase in orders. Selling prices are under pressure, of course, but unit costs are dropping considerably. It is difficult to estimate the increase in profits, but they probably will be on the order of hundreds of millions, even though the cost of software is increasing.
- 3) The devaluation in the fall of 1982 is resulting in sizable increases in profits. Unfilled orders are almost 50 percent in dollars and Saudi Arabian rials. Increased profits in 1983 resulting from changing exchange rates alone could amount to 500 million kronor.

Largest Shareholders

Percentage of votes

Α.	Svenska Handelsbanken group (SHB)		32.7
	Industrivarden	22.1	
	SHB's pension fund, etc.	8.6	
	Oktogonen	1.8	
	Tore Browaldh Foundation	0.2	

В.	S-E Banken group Providentia Investor Knut and Alice Wallenberg Foundation Stockholms Enskilda Bank Pension Fund Marianne and Marcus Wallenberg Foundation	14.0 12.6 5,2 3,6 0.8	36.2
С.	Other major shareholders 4th AP Fund SPP Ratos Skandia	3.9 1.5 0.5	5,9
D.	Others		30,6
Tot	al		100

2 Million AXE

AXE, local lines, thousands, 1978-1982

	1977	1978	1979	1980	1981	1982
New orders Installations Backlog, Dec Accumulated instal-	387 7 419	589 20 988	737 88 1,637	726 237 2,126	1,436 695 2,867	1,450 956 3,371
lations, Dec	7	27	115	352	1,044	2,000

Future Changes

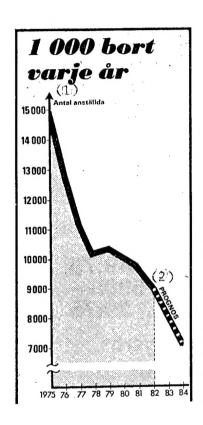
Major changes in LM Ericsson 1983-1985

- 1. The industrialized countries' share of sales of telephone exchanges and private branch exchanges will increase. Developing countries are finding it more and more difficult to make purchases.
- 2. The percentage of information handling in the group's total volume is increasing. It was about 24 percent in 1982.
- 3. The number of workers is decreasing both in Sweden and abroad by $1,000~\mathrm{per}$ year.

- 4. The number of white-collar workers at the firm's headquarters in Stockholm is being reduced by about 500. Most will be reassigned to the eight new sections with decentralized responsibilities.
- 5. The number of individual customers will increase drastically.
- 6. Investments will be made in companies in Sweden producing software. These companies will be scattered throughout the country.
- 7. Electronics will become a more and more important part of production.
- 8. Systems for telephone exchanges will be chosen in Norway, Korea, Thailand, Greece, and Uruguay.

What is unique about Ericsson?

- 1. Stock markets highest value.
- 2. Owned by two major banks.
- 3. One of six companies listed on the stock exchange having shares with 1/1,000 of a vote.
- 4. Greatest decrease in number of employees in Sweden since 1975.
- 5. Second highest dividends among companies listed on the exchange, 212 million kronor in 1982.
- 6. Rapid technological advances.
- 7. Broad and deep international organization. Many companies established abroad.
- 8. Quality oriented. The goal is to produce a telephone exchange with a maximum of only 2 hours down-time in 40 years of operation.
- 9. AXE has been accepted by 45 countries, of which just over 20 have chosen it as a "system."
- 10. Public relations director is an engineer.
- 11. Second highest number of shareholders among companies listed on the exchange.
- 12. Largest computer facility (Alvsjo Computer Centre) in northern Europe.



1,000 lost each year.

The number of employees has dropped by about 1,000 each year since 1975 and the trend is continuing.

Key to graph:

- 1 Number of employees
- 2 Predicted

9336

OFFICIAL BOARD RECOMMENDS EXPANSION OF FOREIGN CABLE TV

Stockholm DAGENS NYHETER in Swedish 15 Feb 83 p 5

[Article by Bo Westmar]

[Text] The board of Swedish Television has approved the expansion of cable TV--under the condition that future cable systems include the two Swedish TV channels. If pay-TV is introduced, it also should be included in the cable system.

Which foreign channels will be televised will be decided through negotiations with the other TV companies in Europe.

The Telecommunications Service is prepared to test cable TV at several locations in Sweden. The Telecommunications Service wants to make it possible for about 4,000 households in Lund to watch Swedish, Danish, West German, and East German television.

So far, however, there are no guidelines for transmission. How will the foreign TV companies be compensated? Should both Swedish TV channels be sent over the cable? What should be done about advertising over the foreign channels?

Reservations

These are a few of the questions that will be dealt with quickly by the state study on mass media that will be set up by the government in the near future. Ultimately, the politicians in parliament will decide whether or not Sweden will build a cable TV system throughout the country.

"The development of cable TV in Sweden is a natural consequence of technical advances in the media, which have opened the door to new possibilities for distribution and communications.

This was the opinion of the Swedish Television board, which approved Swedish cable TV last Monday. There were some reservations, however:

As proposed in Great Britain, the two Swedish channels should be obligatory in the future cable TV system.

If a pay-TV channel is introduced, it also should be included in the cable system. TV chief Sam Nilsson will study the format of any possible pay-TV in the future. His report will be complete this summer.

Swedish Television also assumes that the transmission of foreign programs by cable TV will be regulated through agreements, in accordance with the policy being developed by the broadcasting companies in the Nordic countries and EBU (European Broadcasting Union).

Permission

Whether or not companies other than these will be granted permission to use cabel TV must be decided by the government, according to the TV board. This should not occur, however, in a form that would damage Swedish Television or make it more difficult to "fulfil its responsibilities" toward the public.

"It is important that the general service provided by television not be lost in the discussion of cable TV," television chief Sam Nilsson said.

Two members, Anders Bjorck and Gunnar Hokmark of the Conservative Party, had reservations against the Board's statement.

"The board's proposal means that the future structure of cable TV would become inflexible. We simply would have a new monopoly."

"Absurd"

Anders Bjorck would like to see freer use of the new medium. He would remove the requirement that Swedish TV channels be included and he also would deregulate foreign broadcasts.

"Powerful forces are attempting to create a cable TV monopoly. Among other things, that could undermine future use of the medium by the press."

Anders Bjorck also finds it "absurd" that discussions are underway to eliminate advertising from foreign programs.

The parent company Radio Sweden also will take a position on cable TV in Sweden in the near future.

9336

CSO: 5500/2618

END